HENNEPIN COUNTY library
Officially Withdrawn
from Hennepin County Library

THE CHINTZ BOOK

BY

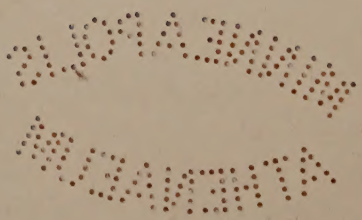
MACIVER PERCIVAL

LONDON
WILLIAM HEINEMANN, LTD.

First published 1923

90459

S S 18 De '23



DEC 15 1923

Printed in Great Britain

PREFACE

THERE are no more charming fabrics for informal use, whether for furnishing purposes or for personal wear, than the decorated cottons which—under a hundred different names—have been such universal favourites since they first became fashionable in Europe in the seventeenth century.

I have written this little book about them mainly for lovers of old furniture who like to see their treasures in the setting best suited to them, because for certain kinds of old furniture the right chintz is undoubtedly the most successful background.[1]

The Chintz Book contains not only an account of the fabrics which were made in England in bygone days, but also of their prototypes, the " painted callicoes " imported from India in vast quantities in the seventeenth and eighteenth centuries, and of their rivals the French " Toiles de Jouy," which, at the end of the eighteenth century and the early nineteenth, had so considerable a vogue here as to form a serious menace to our growing cotton industry.

The numerous illustrations have been chosen from the cottons of many countries and periods, and form a guide to the styles in use at different times.

Even for those who do not attempt " period furnishing " the subject is full of interest, as the cotton trade has for over a century been one of the principal sources of the nation's wealth. The rise of this industry to its position in England has often been

[1] Of course it is practically impossible to obtain the actual old material in sufficient quantities for use, but excellent reproductions are available.

written about, but generally from the view-point of the student of our commercial development or from that of the mechanical engineer, so that the question of design has been either treated as of very secondary importance or else been omitted altogether, though the beauty of the English patterns and their richness of colouring played their parts in the building up of our huge export trade.

It is a great pity that there are so few collectors of these charming fabrics, as interesting specimens are not difficult to acquire, and a series showing the transition from quite early styles and methods to the more mechanical excellences of our grandparents' days has an absorbing interest for lovers of old times and old manners and customs. Such a collection would contain examples of the ages-old technique of hand-work and partial dyeing practised in India until recent times, with its intricate yet bold designs so well suited to the processes employed; the prints from wood-blocks whereby Europeans—lacking the infinite patience of the Oriental—sought to emulate the glory of the Eastern fabrics; the total break-away in design of the prints in self colour from copper plates which had such a surprising vogue in the midst of the riotous Rococo of the mid-eighteenth century; while the latest type to be included would probably be the prints from numerous blocks of metal and wood which mark the highest level of European technique at the beginning of the nineteenth century, before the triumph of mechanism had altogether swept away the need for the close co-operation of craftsman and designer.

ACKNOWLEDGMENTS

My best thanks are due to Mr. H. E. Trevor for his kindness in giving me permission to publish the correspondence between David Garrick (from whose brother George he is descended) and Sir Grey Cooper;[1] to the authorities of the Victoria and Albert

[1] See p. 53.

Museum for supplying me with copies of the letters and consenting to their publication; to the editor of the *Connoisseur* for permission to use illustrations and other matter which has appeared in that magazine; to Miss Garbett, Librarian of the Salt Archæological Library, Stafford, for permission to examine and photograph her old chintz bed-covers; and to all those kind friends here and in the United States of America who have helped me by sending me pieces of old chintz and much interesting information.

CONTENTS

CHAP.		PAGE
I.	Introductory.—A Sketch of the History of Printed Cottons, with some Account of how they were produced	1
II.	Indian "Chints," and how they were made	8
III.	Indian "Chints"—How they were used in England in the Seventeenth and Eighteenth Centuries	18
IV.	How English Cottons were printed in the Eighteenth Century, before the Invention of Machinery	25
V.	Pioneers of English Cotton Printing	32
VI.	The Days of Freedom	40
VII.	How Chintzes were used in England during the Georgian Period	48
VIII.	Printed Cottons in France—Oberkampf and the "Toiles de Jouy"	62
IX.	Dates and Landmarks in the History of Chintzes and Printed Cottons	76
X.	Some Books of Interest to Lovers of Old Chintzes	79
	Appendix	81
	Glossary	96

LIST OF PLATES

CHAPTER I

PLATE		Facing page
I.	Nos. 1 and 2. Blue Resist Prints	3
II.	Printed Linen: German, Sixteenth Century	6

CHAPTER II

III.	Palampore, or Bedcover, from Masulipatam, Eighteenth Century	10
IV.	Glazed Cotton: Dutch East Indies	12
V.	Hand-painted Palampore	14
VI.	Portion of Hanging enlarged from Plate IX	16

CHAPTER III

VII.	Palampore, or Bedspread: about 1750	18
VIII.	Indian Chintz, Eighteenth Century	20
IX.	Pintado, or Painted Calico	22
X.	Indian Painted Calico: Tree of Life Design	24

CHAPTER IV

XI.	Textile Printer's Trade Card	26
XII.	Three Stages of a Furnishing Chintz	28
XIII.	Two Furnishing Prints	31

CHAPTER V

XIV.	Wall-hanging Printed on Canvas	32
XV.	Indian Design for English Print	36
XVI.	Sprigged Chintzes	38

CHAPTER VI

XVII.	A Cotton Hanging	40
XVIII.	Chintz Border: English	42

PLATE IX.—Pintado or painted calico of the seventeenth century. Similar chintzes were much appreciated in England at the end of the seventeenth century for use as wall hangings. V. and A. See enlarged portion, Plate VI.

PLATE X.—Example of Indian painted calico, late seventeenth century. Wonderfully rich and varied colouring. Originally intended as bed-covers (palampore), these were used in England for wall-hangings, curtains, and a variety of other purposes. V. and A.

PLATE XI.—A textile printer's card. Late seventeenth century.

PLATE XII.—These three examples illustrate three stages in the production of a furnishing chintz. The first gives a simple impression from a wood block intended to be filled in afterwards with various colours. The stem will ultimately show segments of black and some light colour; the flowers and foliage will be filled up by successive blocks to give the required shades. The points of the leaves are left rather solidly black, as it was difficult to get the blue of the blue-yellow greens accurately into very fine lines.

The second shows an outline intended to have a black ground, and therefore the boundage or outline is cut very thick on the block to make the work of filling in the ground by hand easier. The upper part of the design, where only the green foliage behind the blossoms has been filled in, appears much heavier than the lower part, where only the light part tells against the black ground.

In the third stage the whole of the ground of a black-and-white design has been filled in.

PLATE XIII.—Two excellent furnishing chintzes of the Sheraton period. Number 1 is a fine print in natural colours on a self buff ground. It would be charming on a Hepplewhite four-poster. The lower print in very soft natural colours has lost something of its original brilliancy. The ground was originally a rich golden yellow, but is now a quiet buff shade.

PLATE XIV.—This is one of the earliest known English attempts at printing on a textile material for furnishing purposes. Most probably it was originally intended for use as a wall-hanging. The style of printing is very much like the pictorial papers used for lining boxes and other cases; possibly the block may have been originally used for some such purpose. It is printed on coarse hand-woven canvas in black outlines from wooden blocks, and has been roughly coloured in parts by the use of body colour put on with a brush. The figures may have been intended to represent Charles the Second and his Queen. The oak tree in the background certainly favours this idea, and the small dogs which are seen in the top fragment may be held to represent the little spaniels of which he was so fond.

The period of this piece is the end of the seventeenth century. V. and A.

PLATE XV.—Having the Indian cottons, high in price and universally admired as models (see Plates III, IV, VII, VIII), eighteenth-century printers most naturally did their very best to copy them as closely as possible. This example is a conspicuous success, the spring of the trailing stems and the arrangement and drawing of the flowering sprays following the original very closely. The colours are brilliant and well chosen. For almost any furnishing purposes, such as curtains or furniture covers, a similar design would be very suitable, and though this particular example is, perhaps, as late as the end of the eighteenth century, similar designs in Indian work were in use in Queen Anne's time. English late eighteenth century.

PLATE XVI.—Throughout the eighteenth century sprigged embroidery was very fashionable and much used, especially for dresses and aprons. In the ladies' magazines of about 1770 there are numerous designs for working the small sprays for powdering over such garments. These two examples of late eighteenth-century chintz designs are probably copied from needlework rather than from the Indian cottons, though there were many powdered designs among them. These designs are carried out in bright colours in accordance with the natural hues of the blossoms represented. They are probably intended for personal wear rather than furnishing purposes. Late eighteenth century.

PLATE XVII.—It is certainly a sign of marked deterioration in the decorative feeling of the time (though the patriotism displayed is laudable) when prints of this type were used for wall-hangings and other decorative purposes. This example, which is printed in pink on cotton, was brought out towards the end of the eighteenth century.

King George III is shown in the right-hand corner standing by his horse, and on the left, Queen Sophia is seen seated with six of her children round her. The Royal family is again represented below. Two princesses occupy themselves in decorating a terminal figure of Hymen. A small view of Windsor Castle fills a portion of the background, and groups of flowers and foliage plants are placed between the figures. English. V. and A.

PLATE XVIII.—An extraordinarily rich chintz border intended for curtains, valances and bed furniture. It is about a foot wide and is printed on a delicately fine though strong cotton fabric. The outlines of the flowers are printed in red; of the rest in a purplish black. The roses and hollyhocks are rich red, while the convolvuli are blue, which is also used for the shaded side of the blossoms. The ground is a rich buff which comes exactly up to the edges of the flowers instead of showing a narrow white rim round the design, as was often the case. Allowance must be made in looking at the illustration for the extra appearance of relief caused by the fact that the red used for the shadows has photographed as black. The appearance in reality is admirably flat and decorative.

PLATE XIX.—Three dresses, late eighteenth century or early nineteenth century, made of printed cotton. V. and A.

PLATE XX.—A very fine Georgian chintz in full brilliant colouring, much resembling the Spitalfields silks of an earlier date. The whole design is not shown. The repeat is nearly a yard long.

PLATE XXI.—A fine red print of exceptionally decorative effect. The design is pictorial in character, but the ground is so well covered that the effect is decidedly more decorative than most patterns of this kind. What makes it particularly interesting is that it is signed and dated, R. I. & Co. Old Ford 1761, and R. IONES 1761. Old Ford was near London. It is an enormously large repeat, being nine feet two and a half inches in length and two feet nine and a half wide. It will be noticed that the design is most skilfully managed, so that it could be joined up into an " all over " pattern or each part could be cut out as a separate oblong panel for framing either walls or as screen panels. Such a design is most unsuitable for covering furniture. V. and A.

PLATE XXII.—Two portions of a large red print designed in the Chinese style so fashionable towards the middle of the eighteenth century. These prints were suggested by Chinese papers, lacquer chests and such things, but were very much modified by their English designers. The rest of the pattern includes a pagoda, a group consisting of a man and woman in the shelter of a conical-roofed summer-house, a rustic bridge or arch crowned by a fanciful building, either a shrine or a small temple in which is a goddess with attendant priests and worshippers, two other Chinese persons holding converse, and numerous fabulous birds and reeds disposed so as to fill all vacant places in the background. V. and A.

PLATE XXIII.—These two designs are impressions from wood blocks and hand coloured. The three-cornered block is a quarter of a circle and was intended to be printed four times so as to form a round medallion for the centre of a bedspread. The other design shows a portion of a border and a corner. They were meant to be printed on cotton material and applied to plain stuffs so as to ornament bed furniture and curtains. This method of using applied borders to build up panels and other forms of ornament was much in use during the eighteenth century, and walls were decorated with paper in the same kind of way, a panel with a central ornament being surrounded by lengths of border cut to the required size and pasted on. The principal colours of this design are red and black with the flowers in natural colours. It is one of the very few old chintz designs in which there is anything reminiscent of Adam, and its fine balance is not out of keeping with his work. Late eighteenth century. English.

PLATE XXIV.—This bed was once the property of David Garrick, and is hung with Indian chintzes which were sent to him as a special gift from India. The tone of the paint-work is a deep rich ivory or buff with green ornaments. The linings and trimmings and also the fringe are green. The whole effect is very harmonious and must have been very brilliant when new. The suite of furniture which accompanies it is decorated in Oriental taste, and was prepared especially to be in keeping with the character of the hangings and bed-quilt. The panels of the valances have been specially designed for their situation. V. and A.

PLATE XXV.—A wonderfully bright and gay example of the large class of English designs inspired by Oriental patterns. The photograph shows only a portion of the design, which is on a large scale. The heavy stem is in green, yellow and brown; the leaves are of blue and yellow green so arranged that a portion of the yellow is left clear to represent veins or an edge; the flowers are blue, pink, lilac and yellow, but there is no attempt at a natural effect, they are simply spaced out so as to distribute the colour evenly over the whole pattern. The tiny forget-me-not-like flowers are simply filled in with the same bright colours. A curious optical illusion is to be noticed in connection with those of the forget-me-nots, which are left white. Though they are exactly the same as the rest of the ground they appear to stand forward as being distinctly white.

PLATE XXVI.—A particularly soft-coloured print of a very popular early nineteenth-century type. The colours are very mellow, blue and red predominating; the ground is a warm fawn colour. The general idea of the design is inspired by the Indian painted calicoes, but the effect is not in the least like them. The cotton ground is very fine and stoutly woven, making the fabric particularly flexible and giving it most delightful draping qualities. The design is one which would be equally suitable for curtains or furniture covers. English manufacture.

PLATE XXVII.—Two most interesting panels of a kind which were very popular in the Sheraton period, being used for applying to plain material for bed furniture and for ornamenting chairs and other seats.

The oval was issued in commemoration of the Jubilee of George III, and the figure 50 between the letters G. R. shows its date to be 1812. It is printed in vivid colouring with a preponderance of bright canary yellow, then a new and most fashionable shade.

The delightful rectangular panel is in the rich indigo and madder colours copied from Indian cottons, and is of about the same date.

PLATE XXVIII. 1. A finely printed cotton in varied colours printed at Nantes. Eighteenth century or early nineteenth. V. and A.

2. An old French design in various colours.

PLATE XXIX.—TOILES DE JOUY.

1. Cotton hanging designed by Pierre Prud'hon (*b.* 1758, *d.* 1823). Period of the First Empire.

2. A red print somewhat in the Louis Seize style. Early nineteenth century. Similar cottons were considered very suitable for lining small rooms, and were also used for curtains and bed furniture. V. and A.

PLATE XXX.—This extremely interesting fragment is part of a very large design which was brought out in the year 1783, known as "Manufacturing Processes." It has evidently formed the seat of a chair, but was doubtless originally intended as a wall-hanging. It is printed in red of one tone from copper plates. The part shown gives a view of workmen preparing the cloth by beating it with flails; in the right-hand corner is a fragment of the part of the design which shows a man printing with a block, while below the later method of printing with a press is in progress. The celebrated bell which Oberkampf himself used to ring to call his workpeople together and to dismiss them is seen on the top of a post. Printed at Jouy by Oberkampf. French.

The inscription on the material in the press is: "Manufacture Royale de S. M. P. Oberkampf." V. and A.

A portion of a cotton hanging printed in greenish-brown with classical designs. Similar patterns were printed in great quantities at Jouy by Oberkampf, and were extremely popular for furnishing purposes, both in France and England. This design contains a square panel with an illustration of the fable of the Wolf and the Lamb. The wolf is shown accusing the lamb of muddying the stream. There is a representation of Diana standing equipped for hunting with bow and quiver, small oval medallions enclosing greyhounds, and numerous other devices all displayed on a ground covered with a diaper pattern.

It is a French print of the Empire period. V. and A. Both these prints are designed by Huet.

PLATE XXXI.—TOILES DE JOUY.

1. Designed by Horace Vernet and issued in 1815. It represents hunting in the Forest of Fontainebleau: "La Chasse."

2. A red print designed by Huet.

PLATE XXXII.—Three dress patterns on dark grounds.

CHAPTER I

INTRODUCTORY—A SKETCH OF THE EARLY HISTORY OF PRINTED COTTONS

OLD chintzes! The words bring at once to mind visions of colour bright and gay, yet soft and subdued withal, of dark gleaming mahogany, honey-coloured oak, walnut of mysterious grain, reflecting in their polished surfaces the tints of curtains and hangings, of sunlit parlours scented with rose and lavender in quiet country parsonages and picturesque manor-houses—in a word, all the surroundings of a typical English house.

These charming fabrics indeed sum up very many of the qualities which an Englishman loves to find in his environment. Fresh, bright, unpretentious, brilliant yet not obtrusive, they have so many points which endear them to us, that an old English house without a chintz room is rather like *Hamlet* with the Prince of Denmark omitted.

Yet, after all, chintzes are a comparatively recent introduction into this country. Less than three centuries ago they were all but unknown here, and the few examples which had come into the country were probably treated more as curiosities than anything else. Their history here must be held to date from 1631, when permission to import them was granted to the East India Company, though doubtless they were not unknown before.

The name "chintz" bespeaks their Indian origin, as "chint," from which it is derived, signifies in Hindu, "coloured" or "variegated." The term was applied by reason of the coloured pattern and not, as we now use it, because of the stiffness of texture and shiny surface of the fabric. Curiously, this use of

the word is to a certain extent retained in other trades. Thus a carpet salesman will speak of a " self-coloured carpet with chintz border," meaning thereby that though all the centre part is of one colour, there are other bright colours introduced round the edge.

However, nowadays the ordinary chintz has a hard glazed finish with considerable polish, which has its advantages as a means of repelling smuts and dirt, but which injures the draping qualities of the material and is troublesome to reproduce after a visit to the laundry.

The old importers used many names for the different decorated cottons besides " chints," the most usual being " Painted Callico " and " Pintado." This last is an old term derived from the name used by the Portuguese, who were the earliest traders to undertake regular commerce with India by means of the new route round the Cape of Good Hope, which they first used in 1498.

Though in Europe these decorated cottons are a comparatively recent acquisition, they have been made from very early times and the dye-stuffs remained the same for nearly two thousand years, though the methods of applying them have varied in different countries and at different periods.

The elder Pliny, writing in A.D. 70, gives an account of decorated cottons as known to the Egyptians of that date, which would describe equally well Hindu work of the seventeenth and eighteenth centuries, or indeed madder colours in England in the nineteenth century.

" Garments are painted in Egypt in a wonderful manner, the white cloth being first stained in various places, not with dye-stuffs, but with drugs, which have the property of absorbing colours. These applications do not appear on the cloth, but when the cloths are afterwards plunged into a cauldron containing the dye liquor they are withdrawn fully dyed. It is wonderful that although there is only one dye in the cauldron, the cloth is dyed of several colours, according to the different properties of the drugs which have been applied to different parts; nor can the colours be afterwards removed."

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

PLATE I

Blue Resist Prints from Wood Blocks, Mid-Eighteenth Century

Whether India derived the knowledge from Egypt or Egypt from India is uncertain, but clearly the principles governing the art were well known at that early date. It is interesting to compare Pliny's account which sums up the main facts with the detailed account of R. P. Cœurdoux seventeen centuries later (see Chapter XI and the Appendix).

From Egypt come, too, the earliest examples of printed textiles which have yet been discovered, indeed they are among the earliest specimens of printing on any material. These vary from very simple diaper ornament to elaborate figure subjects such as those shown on the fragments of a door-hanging now in the Victoria and Albert Museum, which, when complete, must have been a very beautiful thing. It represents the Communion of the Apostles, St. Thomas alone remaining practically perfect. There are also large portions of SS. Mark and Peter with their names in Greek characters. There are at the same Museum other specimens of printed textiles of the fifth century, in fact the collection of early Egyptian printed fabrics housed there is more complete than any other.[1]

Some of the simpler designs are built up by means of several stamps and not printed from one block, as would be the case with a single colour print at the present day. This, of course, necessitated an individual attention to each detail of the pattern, making the method used an extremely flexible one and enabling the designs to be adapted exactly to the space to be filled. For example, if a cotton fabric has to be printed nowadays with inch-wide rosettes three inches apart, the roller is covered all over with the design, so that at each revolution a large number of rosettes are swiftly printed across the entire width of the cloth. In the eighteenth century perhaps only eight or ten would have been cut on a block, but impressions would have been made on the cloth side by side, so that in the end the whole would have been covered. But in many cases the Egyptians appear to have subdivided the pattern

[1] See *Victoria and Albert Museum: Review of the Principal Acquisitions during the Year* 1914, p. 71, fig. 36.

into its component parts and made small blocks of each of these, applying each separately and thus building up the design required. Naturally when using blocks little larger than a seal, they were able to adapt their work exactly to the purpose of the finished garment or other object which they might be decorating. Of course the method, though slow, could equally well be used for ornamenting material in bulk.

Thus Professor Forrer describes a little child's tunic which he discovered at Akhmîm, which he considers may possibly be as early as the fourth century A.D.[1] In cut it is like the well-known "Holy Coat of Trèves," and it is patterned with wavy lines arranged diamond-wise with a white spot at the points of intersection and a rosette in the middle of each space. For ordinary single-colour block printing, as practised in the eighteenth century for such a pattern, a block would have been cut with the pattern exactly as it finally appears (but, of course, reversed in relief on the wood), it would have been coated with colour, applied to the material, and the design would have been transferred as a whole.

The Egyptian worker, however, seems to have used three small stamps, a short bit of wavy line, a rosette and a blob, and for each diamond he applied the wavy stamp four times, the rosette once in the middle of the space and the spot at the junction of the lines, then followed on with the wavy lines again. Of course he could use the same stamps in a hundred different ways, to make as many varieties of patterns, and an ingenious man need never have turned out two pieces of work alike, provided he had a score or two of stamps made as lines, circles, vandykes, rosettes and so on.

Possibly some of the more ornate pieces were painted on by hand; if not, large blocks would have had to be specially cut.

The little tunic above described is an early example of "resist dyeing." The printing was done with unctuous clay or wax (as described on page 102 of Glossary under "Reserve"), and the cloth then immersed in the dye-vat. When the protecting film was removed, the pattern appeared white on a coloured ground.

[1] Forrer, R., *Les Imprimeurs des tissus.*

No cloths dyed with patterns in vivid shades of different colours such as were made in India have been discovered in Egypt, but, as we have seen, the method of obtaining them was known to the Egyptians, though how far back their acquaintance with these intricate processes extends it is impossible to say. Perhaps even Joseph's coat of many colours, so marvellous as to arouse the hatred of his brethren, came from Egypt.

We do not gather from Pliny that these decorated garments had been imported into Italy, though, of course, it is quite possible; he appears rather to describe them as strange curiosities; but if they were known, it is unlikely that they would be looked on in any other light than exotic luxuries. It is almost certain that they were never copied by the Romans; their manufacture necessitated a thorough knowledge of dye-stuffs, and the dyer's art was not apparently well understood in Rome.

During the Middle Ages printed materials were used both for decorative purposes and to a certain extent for wearing apparel. The colours, however, were simply pigments applied on the surface by means of wood blocks, and the designs are very similar to those used for weaving silk and brocades. Metallic decoration was also employed, and it would appear that the printed stuffs were intended as cheap substitutes for woven silken fabrics, which were then, of course, enormously expensive; and the designs follow the originals as closely as possible. The results are very different in effect to anything which we understand by "chintz," and are only described because these printers' workshops no doubt acted as training-grounds whence (when later the beautiful effects possible on cotton were revealed) workmen who understood the art of block-printing on textiles could be recruited to learn the new methods in emulation of the imported Indian hand-painted fabrics.

Professor Forrer[1] considers that the art of ornamental block-cutting was developed in the Rhenish monasteries, where perhaps the earliest example of printing for book-making is found in the use

[1] Forrer, R., *Die Kunst des Zeugdrücks.*

of stamps for the outlines of initial letters. From the eleventh century rich silks were imitated by German textile printers by means of wood blocks used with gum or some sticky substance by which gilding or silvering was attached to the fabric. These blocks are generally little more than silhouettes, which are filled in solidly except for slight markings such as petals of flowers or wing outlines on birds, sometimes not even those. The designs are always based on silken originals, and the contemporary brocades were the principal models.

Later on, from the fifteenth century the patterns are more elaborate, no doubt being to some extent inspired by the tapestries for which they were a cheaper substitute. At first, however, the blocks were small, but after the first efforts the printers learnt to produce larger and more important work.

Colour and metallic printing gave place to black on white, or sometimes on red or other coloured linen. There was in the sixteenth century a phase of admiration for the simplicity of black on white, and in various crafts colour was laid aside; witness much of the fine embroidery of the time in which the delicate tracery of black silk on white grounds had an immense vogue for personal wear and household use. Some of these prints, however, are touched up with colour by hand.

The technique of the blocks used improved as more practice was obtained in cutting them by their increasingly general use for book illustrations, and thus the art of book ornament and textile printing act and react on one another. For just as the earlier use of printing was on woven fabrics, but was developed to an enormous extent when the art of printing from movable type was discovered, so later the use of printing on continuous rolls of textile material from cylinders preceded their use on rolls of paper as used for newspapers at the present day, when the huge output of the daughter art is a hundred times or more greater than that of the prototype.

These printers were, of course, workmen who might con-

PLATE II

Printed Linen, Sixteenth Century

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

ceivably be equally skilled in both sides of their craft, that is to say, they were in many cases block-cutters as well as printers. This point of view is noticeable when the history of the mediæval Trades Guilds is studied. All craftsmen had to belong to some Guild or other; the more important trades had Guilds of their own, while the numerous smaller branches dependent on them, or doing work of a similar kind, were affiliated to the predominant partner. The question as to which Guild the textile printers should belong was a difficult one, and was decided differently in various towns. They might equally well be considered as being dependent on the weavers, the decorators and painters, or the wood-working trades, according to whether the point of view taken was that they were employed on textile fabrics (when the weavers could claim them), as decorating the said fabrics (when the painters seemed to be the right guild), or as making and cutting wood-blocks (which brought them into the carpenters' guild). Of course each Guild was anxious to have as many adherents as possible, as its power and wealth increased according to its numbers.[1] On the whole, the view taken was that of Cennino Cennini: that their trade was "the Art of Painting with the Block," and they were included with the "painters."

At the end of the seventeenth century the difficulty was increased by the adoption of another technique, the art of "reserve" printing, with the resulting application of colour by means of dye being introduced, which gave the "Dyers' Guild" a claim.

This marks the beginning of a new phase in the development of printed textiles, for with the spread of the use of Indian "chints" in the seventeenth century, and the introduction in a modified form of some of the Indian methods into European print works, the real history of "chintzes" in Europe begins.

[1] The whole question of the connection of the textile printers with the Trades Guilds is dealt with in a most interesting way in Professor Forrer's *Les Imprimeurs des tissus.*

CHAPTER II

INDIAN " CHINTS," AND HOW THEY WERE MADE.

THE earliest chintzes used in Europe came from India, and it is just as well to have a clear idea of what they were and how they were made. For they were the models which the European printers of the seventeenth and eighteenth centuries kept before them as a counsel of perfection, though they used other methods in producing a similar effect; *exactly* the same results they could not obtain, but they got as near to them as they could. The economy of time effected by printing the outline from wood blocks, which is the European way, is of course enormous, but the Indian process of drawing it by hand over a stencil guide gave a far finer and more flexible line, and these decorated panels are as far above the block-printed cottons of the English calico printer as the best of these are in front of the ordinary machine print of the present day.

Long before Indian " chints " were imported into England, European paintings and prints on cloth and linen had been used for household decorations, but they faded and dulled with time, while the " chints " only improved with use, getting brighter and more beautiful each time they were washed. So while the fashionables used them and merchants made fortunes by importing them, the craftsmen and dyers sought for the secret of their manufacture.

Gradually, bit by bit, Europeans learnt some of the Eastern methods and adapted them to their purposes, but the whole process has never been carried out in the production of anything approaching the elaboration of the finest Indian " chints."

The beauty of old Indian " painted callicoes " lies first of all in

PORTION OF SEVENTEENTH-CENTURY PALAMPORE OF MOST EXQUISITE WORKMANSHIP.
IT IS PIERCED WITH A STRIP OF ANOTHER PANEL.

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

their colour, which is the first thing to strike the eye. Lovely rich tones of rose, from full crimson to delicate shell pink, purple fading to palest lilac, blue of the softest, fullest hues, and to these there were added originally rich green and a citron yellow, though these have faded by now. The glorious colour was used to give expression to designs of infinite variety, favourite among them being the enormous " Tree of Life " patterns which adorned so many of the palampores imported by the East India Companies, English, French and Dutch. The handsomest and largest of these have majestic broad trunks, displaying in profusion flowers of bewildering variety; others are crowded with figures, or large birds of wonderful plumage are perched amongst exotic foliage and strange plant growths. Then, on drawing nearer, one finds that in addition to the broad decorative effect of colour and subtle and intricate design, the whole thing has a wonderful added beauty of minute and exquisite detail, and that the spaces which seemed one flat sweep of colour are, in fact, nothing of the sort, but that every bit of the whole tinted surface is built up of a wonderfully delicate patterning, though so subsidiary to the general scheme that it does not interfere with it at all. Every leaf, every flower, is full of tiny markings, spots, or shadings, sometimes corresponding to the veinings which are found in Nature, and at other times seemingly inconsequent and only added to fill and break up the surface.

We are now so used to detail carried out by machinery, that unless the wonder of these cottons—that they are all accomplished by hand-work—is pointed out, the true significance of these beauties may be passed over. The time and patience employed in carrying them out must have been enormous.

A Dutch seventeenth-century writer [1] amusingly describes the making of them thus : " The painting of ' chints ' proceeds in the most leisurely manner, similar to the crawling of snails which

[1] Havart, *The Rise and Fall of Coromandel*, 1693, quoted Hadaway, W. S., *Cotton Painting and Printing*.

appear to make no headway. Anyone who would represent Patience . . . could use one of the 'chints' painters of Palicol as a model."

In order to obtain these wonderful effects in a fast dye—and that the colours are produced by permanent dyes, not pigments, is the essential quality of a true "chint"—the most elaborate processes were necessary.

There is extant a most interesting account written by a Jesuit priest, Father Cœurdoux, to his headquarters in Europe, and dated from the East Indies, 1742, which gives a description of the art as practised then, which, as a matter of fact, differs not at all in its essentials from the way in which Pliny describes it as having been carried out in Egypt in his time.[1]

Father Cœurdoux begins by saying that he has been asked many times to communicate any discoveries that he might be able to make in the part of India to which he had been sent as a missionary, and at last he has had a little leisure and employed it in "learning the way the Indians make those beautiful cloths which are objects of trade with the Companies established to extend commerce." "These cloths are principally of value because of the vivacity and the lasting qualities of their colours, which, far from deteriorating when washed, only become more beautiful."

He says that he puts down the failure of European scientists and workpeople not to their lack of skill, but to the fact that India possessed ingredients, and above all water, of a special kind, "which contribute to the beauty of their mixture of dyeing and painting."

It is not necessary here to follow the Reverend Father through all the minute details, which are of interest only to those who have some acquaintance with the technique of the industry. The account may be briefly summarised thus :

[1] The whole account, which, though full of interest to those who wish to study the technique, might weary the general reader, is given in literal translation in Appendix A, p. 81.

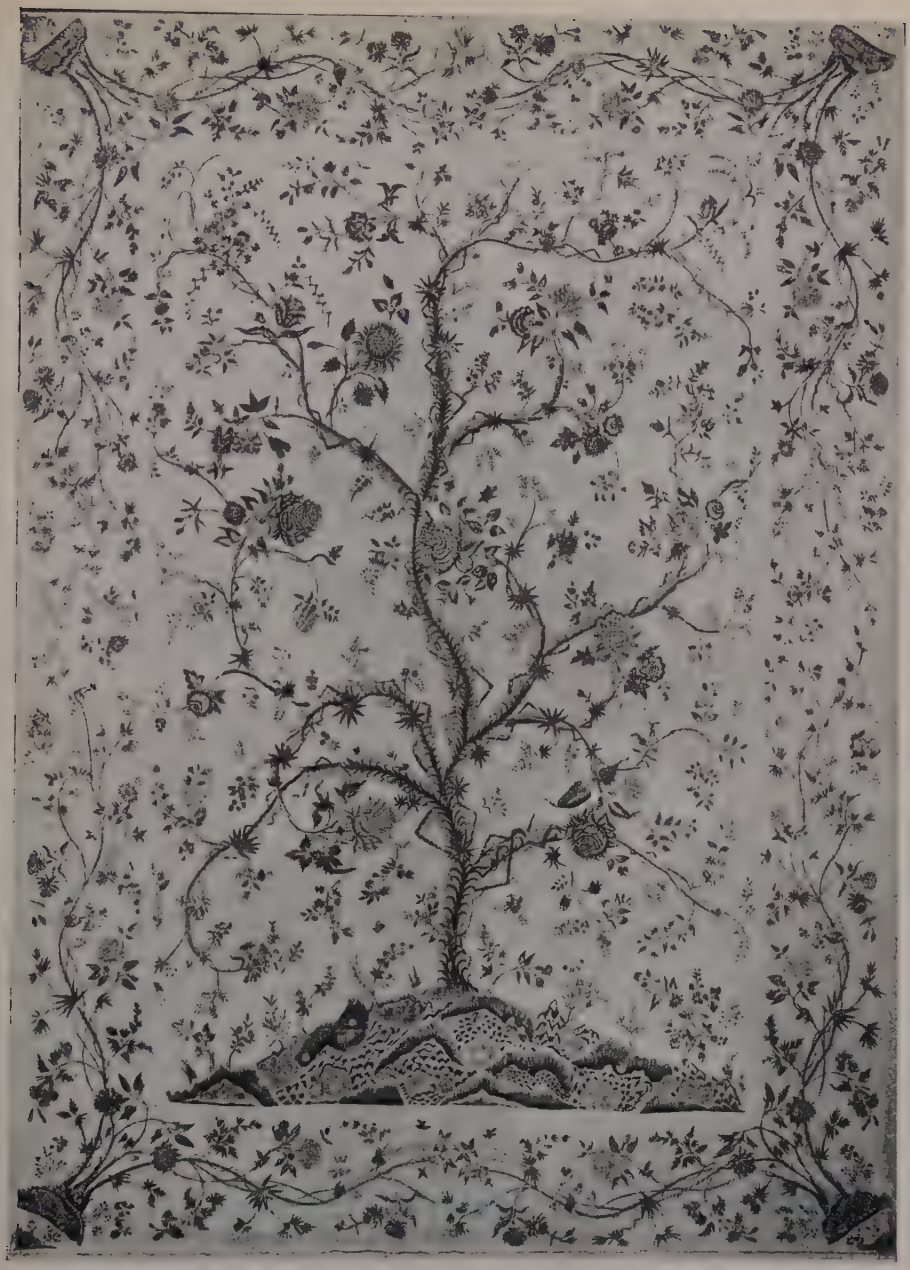


PLATE III

PALAMPORE, OR BEDCOVER, FROM MASULIPATAM, MADRAS, EIGHTEENTH CENTURY

PROPERTY OF THE
MINNEAPOLIS
ATHENÆUM

" The half-bleached cloth " (he calls it " linen," but none of the Indian chintzes are worked on anything but cotton) " is first soaked in a mixture of buffalo's milk and the fruit of a plant called cadou.[1] It is dried, then again damped and smoothed or burnished to give it a fine surface, the buffalo milk taking the place of the size, which is used on paper to prevent colours from running and blotting. When the cloth has been prepared and is lissom and polished enough, the pattern is drawn. The painter sketches his design on paper, and having pierced holes along the principal lines with a needle, he puts the paper over the cloth and passes powdered charcoal over the pricked holes, thus transferring the design to the cloth. Lastly, the lines are followed with a paint-brush and colour, and the outline is complete. So far, it is just the usual process employed by embroideresses in preparing a piece of needlework. Then all parts which are to be solid black are painted in, and the red outlines for red flowers are also painted. The blue is the first colour to be filled in, and it requires elaborate preparation. It is not applied by a brush, but by soaking the whole of the cloth in a preparation of indigo. In order to confine the action of the dye to those places where blue or green are required, the rest of the surface has to be covered with wax. The wax is applied on one side only and then placed in the sun for just sufficiently long to melt the wax enough to let it penetrate to the other side. The painter now hands the cloth to the blue dyers, who are a special class of workpeople." The Reverend Father says he inquired " whether it would not be simpler to paint the blue parts in with a brush, but the dyer replied that it would be easier, but the colour would fly after two or three washings.

" The wax is then removed from the cloth by steeping it in boiling water.

" The cloth is afterwards fully bleached and prepared again with cadou and buffalo-milk for the red colouring.

" Before the red is put on, every detail which is intended to

[1] This is a kind of myrobolan plum.

show as white in the midst of the red is painted with wax. Then in succession the different preparations for the various shades of colour, such as that of the tone of wine lees and all other colours of the red class, are added (it may be mentioned that these paintings are not of the actual colour, but of solutions which enable the cloth to absorb the colour when put into the dye). The cloth is then boiled in the actual dye, and this brings out the colour only on those portions prepared by the preliminary painting, and after the ground has been bleached and cleared as before, the red colours are complete.

" The green and the yellow are the same dye, in the former case painted over blue, in the latter direct on to the white cloth. This dye is not permanent, and soon disappears when washed with soap.

" The brushes used by the natives are made of bamboo pointed and slit up a little way; they fasten a piece of stuff soaked in the required colour round the stem, and squeeze it as required to make it run. For wax they used an iron brush thinner towards the top and fitted with a wooden handle; round the middle there is a bunch of wool soaked in hot wax, which runs down the iron when squeezed."

This slight sketch gives some idea of the processes employed, but only very simple examples would be carried out thus; in the more elaborate pieces the flowers were painted six or seven times, with additional details added in wax each time, which of course, when finally submitted to the dye vat, would come out in shades varying from the lightest to the darkest. I have also omitted the lengthy accounts given by Père Cœurdoux of the numerous soakings, washings and beatings which alternate with each process. Added to all this was the preparation of the colours, so that the complexity of the whole process makes us wonder how the method was originally discovered, and how it survived the vicissitudes of two thousand years, practically unaltered.

Sometimes these decorated cottons are spoken of as Indian

PLATE IV

Glazed Cotton, Black Outline filled in by Hand in Colours.
Dutch East Indies, Early Eighteenth Century

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

prints, but this is a misnomer. Certainly in some of the later examples there are portions in which stamps have been used as a short cut, to simplify the work when there are constantly repeated small details, but these are not used in the fine examples, and even in cases where they are used it is only for insignificant parts. In the eighteenth century printed outlines were used on commercial work, and of course, by the nineteenth century, printing and the use even of coal-tar colours had become general.

The great advantage of the use of handwork over machinery is that every part is individual and can be altered to suit the circumstances of its use, and the East India Companies soon found a way to have special designs worked out for special orders. In many cases these were artistically inferior to the traditional patterns which had been handed down from father to son, but from a trader's point of view it no doubt paid them well. For instance, the Maréchal d'Estree had in 1720 a bed worth two or three thousand crowns, with his coat of arms in the middle of the back, which aroused the admiration of Papillon, the great wood-engraver, who says of it : " All the ornaments and flowers were beautifully drawn, the colours admirable and charming. This bed furniture was expressly made in the interior of India (though I do not know in what town) from drawings which M. le Maréchal had sent."

Just as much Chinese porcelain during the eighteenth century was painted with crests and armorial bearings to the special order of noble families, so similar decoration was applied to the painted calicoes, especially for beds and bedspreads. It would, of course, be quite easy for the Indian workpeople to introduce them as required, tracing the patterns supplied them by means of " pouncing " in the usual way.

The borders of many of the large palampores imported by the East India Company show evidence of European influence, the design taking the form of festoons of flowers looped up at regular intervals in a formal way, which differs entirely from the unconventional treatment of rambling trails of foliage and flowers which

is found in the native designs. Besides the large panels there were also lengths of material printed with all-over designs. Some consisted of endless trails with fine, thin stems bearing a multitude of natural flowers, and others were spotted over with sprays and sprigs of flowers; others, again, were ornamented with the pine pattern, and there were an infinity of spots, rosettes and small formal patterns, used, however, more for dress than for furniture.

There are also many small covers and mats of a great variety of patterns, which are often very lovely. They do not seem, however, to be as fine in colour as the larger panels. Many of these show decided Persian influence, and are arranged with a border and a centre, the border being of a running design with conventional flowers and the inside filled with a similar trailing design. In the central portion and the four corners designs with a ground of another colour are inserted which have a very decorative effect.

The way in which these differing parts of the pattern are put in is as follows :—When the worker lays out the cloth for transferring the design through the pricked holes of the stencil, he carefully covers up the parts where he wishes the medallion or other ornament to come with a mask of paper cut to the exact shape; when he has carried out his all-over pattern he removes this mask and replaces it with the ornamental stencil, which, of course, exactly fits the required space. This device enables the painter to fill any sized rectangle with a pattern of individual character with an outfit of comparatively few stencils, as the border, of course, could also be repeated as required to any length. They are not, however, as interesting as those in which the pattern is properly drawn for the exact purpose it is called on to fulfil, and they seem to be a commercialised form.

It is difficult to date any Indian "chint" with accuracy; the designs were traditional, and very likely some that are believed to be early are not so in reality. There appears to be a flatness and breadth of treatment in the earlier work which the later lacks, and the colours are perhaps fuller. It is probable that there are

PLATE V

HAND-PAINTED PALAMPORE, CENTRAL PORTION

PROPERTY OF THE
MINNEAPOLIS
ATHENÆUM

very few examples older than the seventeenth century in existence, and even these are rare. Some of them can be dated by the costumes of Europeans depicted on them, having been made to special designs, probably to commemorate certain events, and by special order of the Company. In India itself, Mr. G. P. Baker, who has made many inquiries on the subject, found that there were few old examples in the museums and public collections. In Europe there are several collections in private hands and a number of beautiful examples in the Indian Section of the Victoria and Albert Museum, while in France they have been very much appreciated for years, and have been collected by many connoisseurs. Genuine examples are seldom offered for sale, but may sometimes be discovered among the flotsam and jetsam which gathers in every old country house.

It is interesting to know how to distinguish between genuine old work and the modern copies executed by means of the printing-press. If there is a repeating design, find two parts which are approximately the same. If the details are *exactly* the same in every particular, it has been printed and is a modern reproduction. If it is a large panel, say of bedspread size with a large tree pattern, if a modern one it will be printed, and though the centre will, of course, not show a repeat, the border will give scope for comparison. There will also be the fact that the execution is infinitely coarser and the material of poorer quality, the colours inclined to garishness where the originals are rich. If the green is a solid colour it is modern. In old examples the yellow has almost always faded, leaving only a soft, slightly greeny blue, with just a trace of the yellow remaining. In genuine old Indian cottons with a white ground, unless they are of very perfect workmanship, there is often a very faint network over the background of thin thread-like lines intersecting at irregular intervals. This effect is caused by the slight cracking of the wax used to protect the white ground while the blue was being dyed. There is a kind of Japanese ornamental dyeing in which these " crackle " lines are deliberately produced,

but the effect is not the same. Some finely coloured eighteenth-century work has a printed *outline* with hand fillings.

It is a great pity that there are not more good reproductions of Indian cottons of the better kinds suitable for furnishing use, as they are quite the most useful type. There are, however, *some* very good copies, the worst thing against many of them being that they are over-glazed. Chintz should be shiny, but not too shiny, if required to take the place of old materials for furnishing. The old " chints " always were executed on a plain smooth material, not one with raised spots woven into it.

An interesting form of dyeing, though more used for hand- and neck-kerchiefs than for decorative purposes, was the bandanna style. The effect, which is that of white rings surrounding a tiny spot of the ground colour, was obtained by tying waxed thread tightly round small portions of the material, so as to prevent the dye getting to it. The spots were either broadcast over the material or arranged close together to form lines and patterns. This method was often used on silk as well as cotton, and sometimes only the border was dipped in the dye, thus giving a white-spotted coloured border surrounding a pure white centre.

The whole tone of old Indian chints at the present day is a rich yet soft rose colour with foliage and other parts in bluey green and a quiet shade of blue. It must be remembered, however, that these shades are only arrived at after years of use and constant washing, and when a room is being furnished with the idea of reproducing the original effect, as, for instance, a stage representation of a room in the late seventeenth or eighteenth century, a cotton should be chosen which gives the original tones before the yellow had vanished. Of course the yellow over the blue gave the greens, but being the most fugitive of the dyes, it often vanished after two or three washings, leaving the colouring perhaps more charming, but different. The other shades, as Père Cœurdoux points out, are improved by washing and quite unfadable.

The main sources of the actual colours were the roots of a

PLATE VI

Portion of Hanging, Plate IX

PROPERTY OF THE
MINNEAPOLIS
ATHENÆUM

native plant containing a colouring substance similar to madder for the red, pink, lilac and such colours, and indigo for the blue.

The Indians had many superstitions about the methods of preparing the different substances which they employed. One ingredient much used was sour rice-water, which was, of course, a cheap, in fact really worthless liquid and at the disposal of anyone who happened to want it, but there had grown up a kind of taboo about it, and (to quote again from "*Les Lettres Edifiantes*") "There is a ridiculous superstition amongst these Gentiles on the subject of *kangi* (rice-water). It is that anyone can use it himself on any day of the week, but on Sunday, Thursday and Friday they refuse to give it to anyone who is short of it, because they say it would drive their God out of the house."

Then the water of certain wells and ponds was considered as being essential to perfection of colour and absolute fastness of the dyes, though possibly this idea was based on some mineral ingredient which actually was present in the water, and not merely on idle fancy or superstition.

CHAPTER III

INDIAN "CHINTS"—HOW THEY WERE USED IN THE SEVENTEENTH CENTURY AND THE EARLY EIGHTEENTH CENTURY

I THINK there can be little doubt that from the early days of trade with the East Indies "painted callicoes" were now and again included in the consignments of strange, choice and beautiful things that formed the cargo of the many merchant vessels whose owners found in these distant voyages so lucrative a venture. It would be very unlikely that such distinctive and gorgeous wares would be entirely passed over by the keen business men who were always on the alert to buy whatever offered good chances of profit. Nevertheless it appears that for some reason or other they were not in the earliest days regular articles of trade with England, though shipped by the Company between foreign parts.

In 1631, however, the East India Company was allowed by Royal Proclamation to import into England, amongst other things, "satins, taffetas and painted callicoes."

Amongst the letters of the East India Company referring to these fabrics is one addressed to Surat and dated 1641, which shows that at that time chintzes were being put on the market, but that the large panels or quilts were still little known, and had not taken their place amongst the commodities regularly imported.

"The quilts of chints being novelties, produced from £5 5*s*. to £6 the pair; a further supply, therefore, is desired, and both as regards these and the chintses, more should be made with white grounds and the branches and flowers to be in colours, and not (as those last sent) all in general of deep red ground and other sadder colours." These dark grounds with small designs on them

PLATE VII

PALAMPORE, OR BEDSPREAD, IMPORTED BY THE EAST INDIA COMPANY ABOUT 1750
(Central Portion and one Side of Border)

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

appear to have been called "Persian patterns," and "*toile de perse*" is a term still used for similar stuff in France.

The sale of the chintzes and quilts imported by the East India Company increased year by year; even the troublous times leading up to and during the Commonwealth did not hinder the orders. With the Restoration importations increased mightily.

How rarely for matters of interest at this time does one turn to Pepys in vain! Always up to date, he wished to be in the latest fashion in all household plenishings, and on September 5, 1663, he has an entry: "Bought my wife a chint, that is, a painted East Indian callico for to line her new study." This is the spelling in the MS. (see N.E.D.), the word "chintz" as usually printed being a concession to custom.

Evelyn too, so observant and quick to note the new and unusual, gives us another instance of this latest vagary of fashion under another name.

"1665: December 30.

"I supped at my Lady Mordaunt's, where was a roome hung with Pintado, full of figures, prettily representing sundry trades and occupations of the Indians."

Though large quantities of cotton wool in bulk had been imported throughout the seventeenth century, and even earlier, ignorance still prevailed as to what it really was, and Pepys has an amusing entry under date January 27, 1664, which bears on this point:

"Sir Martin Noell told us of the dispute between him, as farmer of the Additional Duty, and the East India Company, whether callico be linnen or not, which he says it is: having ever been esteemed so: they say it is made of cotton wool which grows on trees, not like flax or hemp. But it was carried against the Company." Truth does not always prevail!

Variety was a great point in favour of the "painted callicoes," which, being made without the use of machinery, always differed

a little, and though, of course, the same patterns were used over and over again, it was easy enough to vary colourings and designs when required. This was, no doubt, well known to customers, and in 1682 we find it emphasised in the orders: "Everyone desires something that their neighbours have not the like."

In 1683 there appears, amongst the correspondence of the Company, a most interesting letter; it shows that by that time the "callicoes" were being made for the European market in special sizes. It was dated from London, August 14, 1683. "Send us therefore 100 suits of painted curtains and vallances ready made up of several sorts and prices, strong, but none too dear, nor any over mean in regard; you know that only the poorest people in England lye without any curtains or vallances and our richest in damask, etc. The Vallance to be 1 foot deep and 6½ yds. compass. Curtains to be from 8 to 9 feet deep, the 2 lesser curtains each 1½ yds. wide, the 2 larger curtains to be 3½ yds. wide and 2 yds. long. Each bed to have 2 small carpetts 1½ yds. wide and 2 yds. long; each bed to have 12 cushions for chairs of the same work." These beds alluded to were, of course, four-posters, which were in almost universal use, hung with serge, moreen or other woollen fabrics for plain people, and rich silks and velvets for those of the wealthy class, who could afford the expense.

"Carpetts" was a term used in various ways at this period. Sometimes it had much the same significance as it would have now. Thus we read of a "Persian carpett all of silk to put under a bed," but it was also used for covers for tables and chests, and it must certainly have been for such uses that these "carpetts" of chintz were intended.

In engravings and inventories of the contents of bedrooms of this period there generally appear two side-tables, which would doubtless be used as toilet-table and washstand, and numerous chairs. Beyond candlestands and the equipment of the hearth, there was little else in the room, so with the twelve cushion covers for chairs the entire room would be *en suite*. These chair-cushions

PLATE VIII

INDIAN CHINTZ, ABOUT THE MIDDLE OF THE EIGHTEENTH CENTURY

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

would probably be made up as " squabs " (or, as sometimes spelt in contemporary documents, " sqobs "), the fine Indian fabric not being at all suitable for tight upholstery, although it has a very long life when used for hangings and such purposes.

The chintz hangings must have delighted all those who were learning, about this time, to adopt the new fashions of order and cleanliness in household matters, and who loved (as Pepys did) " to have everything neat and handsome about them." Their brilliancy and cleanly appearance appealed to the taste of the day, a certain rich simplicity having become the mode rather than the obtrusive luxury which had ushered in the early days of the Restoration.

Queen Mary set the seal of her approval upon them by having her own bed hung with them. Indeed in after years she was credited (or the contrary !) with having been the means of introducing them into the country, much to the detriment of home industries, though, as we have seen, they were in reality used earlier.

Defoe, writing in 1722 (*Tour through Great Britain*), in a review of the end of the seventeenth century says :

" The Queen (Mary) brought in the love of fine East-India Callicoes such as were then called Masslapatan, Chintes, Atlasses and fine painted Callicoes, which afterwards descended into the Humour of the Common People so much as to make them grievous to our Trade, and Ruining to our manufacture, so that the Parliament were obliged to make two Acts at several times to Restrain, and, at last, Prohibit the Use of them."

In a later edition he says, writing of Windsor Castle :

" The late Queen Mary set up a rich Atlass and Chints bed, which in those times was invaluable, the Chints being of Masslapatan on the coast of Coromandel, the finest that was ever seen before that time in England; but the rate of those things have suffered much Alteration since that time." Queen Mary also had a chintz bed at Hampton Court.

Writing in the *Weekly Review* in 1708, Defoe, inveighing as

usual against these imported goods, says that a few years earlier (before their importation was prohibited in 1700) they were not only used as " carpets " (*i. e.* mats and table-covers) and quilts, but " crept into our houses, our closets and bedchambers; curtains, cushions, chairs, and at last beds themselves were nothing but callicoes and Indian stuffs." Allowing for Defoe's habit of picturesque exaggeration, he gives us a good idea of the immense vogue which these delightful fabrics had when their use first became general.

At first they were, in the best qualities, extremely expensive and were held in the highest esteem, and it is interesting to note the increasing price as they became more and more fashionable.

The following quotations from the Expense Book of John Hervey, first Earl of Bristol, show the large sums paid for them :

" 1689, Aug. 30. Paid Mary Bishop for ye use and by ye order of Mrs. Jane Harrison for an India quilt for a bed, £38.

" 1690, Nov. 4. Paid Mrs. Cawne for a rich piece of India Atlass for dear wife, £13 10*s*."

" 1701, Jan. 9. Paid Mr. Hatley for ye Atlass I gave dear wife, £33."

The editor of the Expense Book amusingly notes (" I don't know if this is literature or millinery.—F. H. A. H.") It was printed satin or chintz used in all probability to make hangings for her bed on the occasion of the birth of her son Henry, who was born on January 5, 1701. Just at this time the Atlass bed was *the* thing in fashionable furnishing, all the more so that it was prohibited by law !

These fine Indian chintzes and painted calicoes are absolutely the most perfect hangings for use with the veneered walnut furniture of this time. Unfortunately there is a vast difference between the colouring used in the old fabrics and those which are imported at the present day, many of which are wretchedly weak in colouring and design, while some of the more richly coloured examples now

PLATE IX

PINTADO, OR PAINTED CALICO, SEVENTEENTH CENTURY

(See enlarged Portion, Plate VI)

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

made in India for the English market have been reproduced, not from genuine old Indian examples of the seventeenth and eighteenth centuries, but from Italian early nineteenth-century prints somewhat in the Indian style. I think this must be because the delicate workmanship of the originals offers problems to the copyist which do not exist in the broader treatment used in the Italian panels. They are, however, very decorative, and though they do not bear looking into as do their prototypes, are fine pieces of decoration.

I do not think that complete sets of valances, curtains and so on made in the right sizes to match each other, *en suite*, are obtainable in the old patterns nowadays, but the bedspreads can be adapted as curtains, and for valances the borders of bedspreads give an excellent effect.

Valances were not frilled on to the bedsteads, but lined and stiffened and set on plain. The curtains were also lined, generally with a scarlet-crimson moreen, and heavily fringed with ornate and complicated knotting and tassels. The general effect aimed at was the beauty which comes from perfect rendering of numerous minor subordinate details all blending into a harmonious whole. Though the effect is simple it is far from being so, and this apparent simplicity is often more difficult of attainment than profuse gilding and sumptuous silks and velvets.

The effect of these stuffs with their specially designed borders and panels was very different from that of ordinary material of continuous patterns which repeat yard after yard with no beginning and no end.

Reproductions should be selected with a rich reddish shade of rose rather than a pink inclining to blue, and the blues should be the rather dark tone of the old indigo than royal or Cambridge blue. Greens should be generally rather olive, not jade or apple green. The whole colouring should be rich and full rather than delicate.

Naturally the fact that all fashionable people were buying these imported cottons and pouring their money into the coffers of the

East India Company had a very disastrous effect on the important section of the community who lived by the woollen and silk trade, especially the latter. Silk-weaving was a comparatively recent introduction into England, and seemed at first to have a very prosperous career in front of it, but the market for fine silks was necessarily limited to the richer section of the community, and when fashion decreed that cottons should be used instead, the blow was a very severe one and threatened to put an end to the growing prosperity of the silk manufacture as well as to seriously curtail the woollen merchants' profits. Numerous worthy and hard-working craftsmen were being brought to the verge of starvation, and bitter complaints were made. Sermons were preached on the subject and representations were constantly pressed on the Government, until finally, in 1700, the importation of all decorated stuffs from the East Indies, Persia and China was forbidden by an Act of Parliament, which caused great, though as it turned out unwarranted, satisfaction to all connected with the silk and woollen trades.

PLATE X

Indian Painted Calico: Tree of Life Design

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

CHAPTER IV

HOW ENGLISH COTTONS WERE PRINTED IN THE EIGHTEENTH CENTURY BEFORE THE INVENTION OF MACHINERY

Our great-great-grandmothers took the greatest interest in their " callicoes " both for gowns and furniture. The fineness of the fabric, the brilliance and fastness of the colouring, the " elegancy " of the designs were matters that concerned them deeply. Of course if real Indian " chints " could be obtained, their highest ambitions were realised; but if not, English drapers had a large selection of home-printed goods to offer them. They were connoisseurs in the calico-printer's art, these delicate dames of bygone days, nothing but the best contented them; not only had the stuff to look well when new, but it had to prove its worth in wear, and it is on record that one indignant lady took her flowered gown back to the seller in high dudgeon because the colour had begun to fade—two years after she had bought it. " Autre temps, autre mœurs." How many merchants nowadays would, in answer to such a complaint of a chintz or cretonne, replace the offending goods with new amidst profound apologies?

Naturally having a *clientèle* which could distinguish between good and indifferent, and which was not to be satisfied by superficial qualities, the makers and salesmen were eager to produce the best possible results. It called for a real personal interest in the work, and the printers considered themselves very important people. I like the way in which one of them points out to his fellows the importance of upholding their dignity by constant study. " Merely knowing whether work is done well or not may be sufficient for a Draper or Salesman, but a Callico Printer ought to know why

work badly done is so, and consequently how it should be done otherwise." [1]

The whole business of the calico printer in the eighteenth century has a touch of romance about it. Every mixing of dye, every piece of cotton bought, had in it a spice of adventure. They had no accurate measurements or standards of purity vouched for by learned chemists in those days, and the printers had to rely on their own judgment, aided by good luck, as to whether a particular mixture would or would not turn out exactly as expected.

Colour-making was carried out by the printers themselves, and they had to make the necessary allowances for the freshness or otherwise of the various materials, and all through the processes of manufacture they were face to face with the difficulties which are inseparable from the use of unrefined natural products.

For calico-printing as practised in those days was rather a complicated matter, necessitating constant adjustment and experiment in the matter both of the materials and appliances used, because, though the colours used were based on the practice of the old Hindoo workers, which had varied little for centuries, conditions in England were different, and the fact that some of the colours were printed instead of being put on with a brush or by dyeing made matters more difficult.

The actual application of the colours [2] by means of a block was in itself a simple matter, and was done in just the same way as printing on silk and linen had been carried out in the Middle Ages and very much as it is to-day by those firms who specialise in this kind of work. There is in the British Museum a calico-printer's trade card (illustration, Plate XI), issued at the end of the seventeenth century, which gives a very good idea of a block printer's workshop. The printer stands by his table, over which is spread

[1] O'Brien, Charles, *The British Manufacturer's Companion and Callico Printer's Assistant*, 1795.

[2] As explained later, the actual colour was not applied by the printers, but merely a preparation for it.

Jacob Stampe liuing at ỹ Sighn of the Callico
Printer in Hounsditch Prints all sorts of
Callicoes Lineings Silkes Stuffs
New or Ould at Reasonable Rates

PLATE XI

A Textile Printer's Trade Card, Seventeenth Century

PROPERTY OF THE
MINNEAPOLIS
ATHENÆUM

the plain cloth; with one hand he places the block, and in the other he holds uplifted his " maul " or mallet, with which he is just in the act of striking a blow on the back of the block to drive the colour evenly into the material. He has already printed a large quantity of stuff, which hangs in folds on the floor. When the blow has been struck the block will be lifted carefully so as not to smear the impression, accurately replaced on the cloth in another spot after having been recharged with colour, and so on until the whole has been covered with the pattern.

The main difficulty in printing the outline lay in placing the block on exactly the right spot and in giving it exactly the right amount of pressure, so that all the pattern should come out in the same depth of colour all over. In placing his block so as to match and run on correctly from the previous application, the printer had to guide him " pitch pins," which were projections from the block which had to be fitted on to certain marks in the previously printed portions; but while these were reliable for carrying out the first outline, they became less and less of a safeguard as each succeeding tint was added, because the complicated programme of baths, rinsings and boilings that each dipping entailed, stretched or shrank the material, often to a considerable degree. The printer on cotton had many more difficulties to contend with than the man whose ground was paper, because, as we have seen before, his colours were obtained by the use of *dyes*, not pigments.

Certain colours, especially those obtained from madder, were fast only when used in conjunction with other ingredients. This fact formed the keystone of the eighteenth-century calico-printer's art. He could apply his " preparation " or mordant to the part where a certain colour was required, and when the material was plunged in the dye the colour would be fixed on the prepared part only. Moreover, by varying the strength and the ingredients of his " preparation " or mordant, the colours brought up by the one immersion varied likewise. This is the process which Pliny found so wonderful, because the design as applied is colourless (or nearly

so) until developed in the dye-vat, somewhat as a photograph negative is developed, only in the case of the cottons the resultant image is multi-coloured.

Thus there were successive applications of different " drugs," as they called them—our modern term is mordant—alum, tartar, iron, and so on; there was quite a large palette of colours obtainable from a single dyeing, including black, red, pink, lilac and chocolate, and some of the cheaper prints are entirely composed of these colours only.

The mordant and dye having combined on the parts where the former was applied and formed a permanent stain, the loose dye was got rid of by washing, soaking and various baths, and the ground showed white and clear. Yellows were obtained by means of weld by much the same kind of process, but were not so perfectly fast. Blue was obtained by the use of indigo, and green by yellow applied over blue; no solid green was known before 1809, and its use in a chintz, of course, dates it at once as having been made subsequent to that date, though the " yellow over blue " green was used by those firms who continued the old processes for many years later.

The blue of indigo was troublesome stuff for the printer to work with, especially in conjunction with other colours. The Indian process consisted of blocking out all the ground and only leaving the parts which were to be blue exposed and then immersing the whole in the dye-vat. That course was not very practicable for the quick turn-over on which European print works depended, and the indigo was most usually applied by " pencillers," who were paid so much per thousand strokes. Their work is not so permanent as the dyed patterns. These pencillers gave great trouble to the master printers, who had to be continually on the watch to see, firstly, that they filled in the right parts only, and also to see that they did not smear or smudge the colour where it was not wanted. Our English pencillers were not so skilful as the French ones, who could paint leaves and flowers without an outline, and even shade them; but over here all that they were capable of doing was

PLATE XII

Three Stages of a Furnishing Chintz

PROPERTY OF THE
MINNEAPOLIS
ATHENÆUM

to lay a flat tint within certain spaces indicated by lines or rows of dots. The blue was very difficult to put on accurately into fine angles and narrow spaces, and designers and block-cutters who understood their business always allowed for this, and arranged that rather a blobby shape of blue would do without spoiling the appearance of the work, leaving fine points of leaves and such places in solid black. This applied, not only to blue itself, but also to green, which consisted of a layer of yellow over blue, which formed a very pleasant, fairly permanent green. Though, if the work was perfectly done the yellow exactly covered the blue, the little flecks of yellow or blue which appear when the colours do not exactly cover one another have a very pleasing effect.

The printer had also to be careful how he placed his pattern in relation to the width of his cloth, so that there would be little waste at the selvedges. (Would that some modern printers were so considerate !)

A writer of the end of the eighteenth century[1] blames most severely a printer who had carelessly so arranged his sprigs that " either half a sprig most frequently appears, or the cloth is cut to waste." In this case, he continues, " there wanted an attention to the remotest circumstances, the making up of the garment, and this includes the query which might with propriety have been put to that printer, which is, if he had been printing that piece as a present to a favourite female, whether he would not have bestowed more consideration on the particular alluded to."

" Alliteration's artful aid." has been called on to prick the printer's privy conscience, but it seems expecting a good deal of any workman that he should be expected to put as much care into his everyday work as if it were to be bestowed on his " favourite female " !

Sometimes before the pattern work was set in hand the whole cloth was printed over with a vermicular ground quite independently of the outlines of the flowers and leaves which were printed over it. It hardly showed through the colours, but gives a rather flat

[1] O'Brien, Charles, *The British Manufacturer's Assistant,* 1795.

look to the whole pattern. It also recalls the *soutache* ornament which in silk was much used on embroidered garments of the later Georgian period.

Another extremely popular feature in many of the late eighteenth and early nineteenth century patterns is " piqué work," or " pinning." It is found on earlier cottons, but from about 1785 it is very much used. It consists of numerous small dots which were printed from the tops of brass pins hammered into the surface of the block. These dots were used in three ways—either to form complete designs or backgrounds; introduced into the ordinary scheme of the design as part of flowers in lines or groups; or to act as boundaries to indicate to the pencillers where the colour should be laid.

In some blocks the pins were so numerous that room had to be left for the expansion of the block, which might otherwise have split. This pinning was a very favourite ornament until well into the nineteenth century, but as block printing declined in favour of cylinders it passed out of vogue. Fine thin lines were also formed by strips of metal hammered into the block; they made a good firm line and added much to the life of the block, as they supported the wood outlines to a certain extent. Where there was a coloured ground to be added, particularly if it were black or a dark or heavy colour such as the red or plum colour so much used in late Georgian times, the cutter of the block left a thick edge of black on the outside of his outline; this left a wide margin, which the fielders might paint over without any smudging being visible; this was known as a boundage and was regularly allowed for, as the fielders were apt to be careless, and besides, the work could be much more quickly done if they had not to follow every little twist and turn of the outline.

The final stage was to print the maker's name by means of a rough stamp on each end of the piece, which was then ready for the market.

We cannot but regret that the old methods of producing cotton

PHEASANT AND PALM. ENGLISH CHINTZ. LATE GEORGIAN PERIOD.

PROFESSIONAL
MINNEAPOLIS
ATHENAEUM

PLATE XIII

Two Early Nineteenth-century Furnishing Prints

prints have all but vanished from the face of a commercial world. The results were very charming, and best of all able to undergo the " ordeal by laundry " without flinching. Perhaps in this age of change and caprice that is no longer so much desired as formerly, and by the present methods it is quite possible to obtain very much the same general effect.

CHAPTER V

PIONEERS OF ENGLISH COTTON PRINTING

THE early history of cotton printing in England is somewhat obscure. No doubt here, as elsewhere in mediæval times, block printing on fabrics was used as a cheap means of obtaining a decorative effect for wall hangings, and even for garments. It would not be at all difficult for any printer to transfer simple patterns to suitable material using pigments and an egg medium which would give body to his colours, but the results produced by such methods were quite distinct from real " chintz " printing.

Such printing as that carried out by Jerome Lanyer, who, in 1634, patented a method of printing a design in size or glue on " silk, cotton, leather or other substances," the pattern while wet being sprinkled with ground-up wool or silk, producing a result evidently akin to " flock " paper, cannot be considered as even an attempt to imitate chintzes; the aim was evidently to produce a cheap substitute for velvet and other similar fabrics.

There were also coarse outlines printed on canvas and other materials, filled in by hand with rough splashes of colour which served, no doubt, to bring a measure of warmth and comfort to draughty rooms when owners could not afford anything more beautiful. These, again, were more probably inspired by tapestry than the Indian chints.

The date generally given for the earliest calico-printing works in England is 1676,[1] and in that year a grant was given to one Will Sherwin to print on broad cloth " the only true way of East India printing and stayning such kind of goods."

[1] Anderson's *History of Commerce.*

PLATE XIV

Wall-hanging Printed on Canvas, English Seventeenth Century

MINNEAPOLIS
ATHENAEUM

Then in 1669 we get a reference in the correspondence of the East India Company to "a great practice of painting large branches for the hangings of rooms." These may have been on textile fabrics or on paper; it is impossible to say.

In 1690 was established a printing works at East Sheen (now known as Richmond) which was said to have been founded by a Frenchman. There was also a large print-works at Bromley Hall in Essex, which must have been one of the earliest, because when a duty was first imposed, it stood Number 1 in the Excise Books.[1]

We know nothing of the kind of work executed at these places, but almost certainly it would be copied from the less important types of small Indian patterns such as were used for dresses and other garments. The printers could not attempt the large panels, which would call for more skill in the use of dyes than they could be expected to have attained at this time. Very possibly the only really fast colours they understood were a " reserve " of white on blue, and perhaps the madder dye.

A most interesting old trade card of the end of the seventeenth century shows a printer at work on a large repeating pattern in which a kind of flower with a cross in the centre is being impressed at intervals on the lengths of cloth. (Plate XI.)

" Jacob Stampe living at ye sighn of the Callico Printer in Hounsditch Prints all sorts of Callicoes Linings Silks Stuffs new or Ould at Reasonable Rates," so runs the announcement. Though willing to undertake any job that came his way, Stampe was clearly principally a printer of calicoes. He was a " fashion " printer; that is to say, he did not provide the material on which he worked, but the calico or other stuff was brought by the customers, who only paid for its decoration, in much the same way as gold or silversmiths of those days would take silver brought to them and make it into whatever was required, or, if he provided the metal, charged for it at current rates per ounce plus so much " fashion."

[1] Baines' *History of the Cotton Manufacture*, p. 258.

These printers, however, must have done a very second-rate trade, working mainly for middle-class patrons who could not afford the costly imported fabrics so much desired by all. In all probability they only printed the black outline, the fillings being patiently added by hand, or at all events only one other block would be used. However that may be, whether the cottons were of Indian decoration or merely English copies, the effect aimed at was the same clear grounds and brilliant colours in the patterns, and no doubt the nearer the English printers got to their models the better they pleased themselves and their customers. All the cotton material which was used by English printers was imported, but, of course, the linen was home woven or imported from Holland.

With the home printing trade in its infancy, the advocates for the protection of the wool and silk weaving industries practically ignored it as a possible rival. It was so far from perfection that there seemed very little to fear from it and it was left out of their arguments. We may therefore be sure that what English calico printing there was in the seventeenth century was so small in quantity and so far from fine in quality that no danger was apprehended from it. All their efforts were directed towards the crushing of the East Indian trade. " Callicoes and wrought Silks are the things I chiefly aim at, and hope to make it plainly appear that those Two Commodities do us more prejudice in our Manufactures than all the Advantage they bring either to Private Purses, or to the Nation in general, and it were to be wisht the Wisdom of our Parliament would prohibit their been worn in England, else, like the ill-favoured lean kine, they will destroy the use of our Manufactures," so runs a diatribe by Sir Josiah Child of London, writing in 1699.[1]

There is nothing in this that shows any effort to attack English " Callicoes," and they were ignored by the silk and woollen merchants, not, we may take it, from patriotic motives, but simply because, up to the time when Indian decorated cottons were

[1] *Discourse Concerning the East Indian Trade, showing how it is unprofitable to the King of England.*

forbidden entry into the country, English printers did not menace their trade. If, however, the weavers of wool and silk hoped that when the Indian chintzes were forbidden the country, they would have the market for materials for dresses and for furnishing purposes entirely in their own hands, and that, being without opposition a time of unexampled prosperity lay before them, they were speedily disillusioned. For a short time, indeed, they only had the smuggled Indian cottons and the comparatively small quantity of calico printed in England as rivals to their goods. But English people liked the " painted callicoes " and were determined to wear them. The rich paid enormous sums for smuggled goods, and the English and Dutch printers rapidly increased and improved their output, so that the weaving trade benefited little by the prohibition of their Oriental rivals.

We find, in spite of the laws against them, entries in inventories of " painted callicoes " and descriptions of dresses of the same material, but at first the weavers do seem to have made a little headway. Thus in a pamphlet entitled *The Weavers' True Case*, published in 1719, the writer says : " Let us cast our eyes backward fifteen years [that is to say, to 1704, when the prohibition of callicoes decorated in India had been in force four years], and see with what commodities our womenkind were then clothed : we shall see that our Women among the Gentry were then clothed with fine English brocades and Venetians, our common Traders' wives with slight silk Damasks, our country Farmers' wives and other good country dames with worsted Damasks, flowered Russels and flowered Callimancoes, and the meanest of them with plain worsted stuffs. Whereas now those of the first class are clothed with outlaw'd Indian Chints, those of the second with English and Dutch printed Callicoes, those of the third with ordinary Callicoes and printed Linnen, and those of the last with ordinary printed Linnen."

This is a very interesting extract, because it shows the rate of esteem that was accorded to the different kinds of decoration; the European printers being as far behind their prototypes, as " slight

silk damasks " suitable for " common Traders' wives " were behind the " fine English brocades " in which the wives of the " Gentry " were clothed. It seems odd to us that printed linen should come so far behind cotton, but doubtless the colours were inferior.

However, it was not long before the demand produced the supply, and the use of decorated cottons again became general.

A rather amusing reference to the esteem in which the fashionable garb was held is made in the doggerel verses accompanying a print : *The Tea Table*, published in 1710. It shows six ladies talking scandal and drinking tea. The tea-table is—

> " Chief Seat of Slander, ever there we see,
> Thick Slanders circulate with right Bohea."

Various characters are passed in review, and finally of one it is said :

> " Be Dumb ! she'll ne'er consent, she'll sooner die,
> Or wear her painted Callicoe awry."

As if death was the only misfortune which could equal a mishap to her fine gown.

Two of the fair scandalmongers are represented in *négligées* of cotton, one patterned with an all-over floral sprig, the other with a delicate piqué design.

The use of the Indian chintzes and their English imitations continued and grew, giving rise to riots during which mobs of the weavers and their supporters attacked ladies who were wearing printed cottons, tearing the hated fabrics from their shoulders and otherwise ill-treating them. As a contemporary writer observes :

" 'Tis true those Women, Boys and Girls which belong and depend on the Weaving Trade cannot endure to see any Callicoe Gowns pass in their Streets unmolested. . . . Which might be prevented if Women would put on other clothes when they go to those parts of the Town." It would certainly appear to be a very wise precaution to take, but " Il faut souffrir pour être belle," and that it was better to have a torn frock than appear out of the fashion

PLATE XV

Design Copied from an Indian Cotton, English Late Eighteenth Century

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

was evidently the opinion of these " Callico Madames," as they were called.

Round the controversy a considerable literature of pamphlets and broadsides grew up for and against the weavers.

Many interesting particulars as to the kinds of cotton used may be gleaned from these writings. For instance, " A Brief Statement of the question between the Printed and Painted Callicoes and the Woollen and Silk Manufactures in the Kingdom of Great Britain, 1719," gives us the information : " *That the Printed and Painted Callicoes now worn or used in* Great Britain *come under four Denominations.* ALL pernicious and distructive to our Trade, (viz.) *such as being imported by the Dutch are either printed in the* Indies *or in* Holland *and clandestinely run on Shore here in spite of former prohibition,* OR *such as being imported here by our own* East India *Company* and *prohibited to be worn because printed in* India, are pretended to be exported but *are privately run on shore again and sold ;* OR such as being printed here are entered and *shipped for Exportation in Order to draw back the Duties on the Stamps but are relanded and sold here ; and lastly such as are printed here and legally worn and used and under* the Colour of which ALL *the other frauds are practised and concealed.*" A pretty picture of English commercial morality in the eighteenth century truly !

In dealing with the printed cottons, the eighteenth-century scribes showed a command of vituperation that would make a cab-driver sigh with envy. This from *The Spinster* by J. Roberts, 1719, is a mild example :

" A tawdrey, piespotted, flabby, ragged, low priced thing called Callico . . . made . . . by a parcel of Heathens and Pagans that worship the devil and work for a half-penny a day."

It is in other words our modern complaint against " dumping " and the dumpers.

These extracts make still more clear what has already been emphasised of the eighteenth century; although there were English

prints, they were looked upon as a poor, cheap substitute for the imported goods, and the most admired cottons were the " Indian callicoes."

Also it is obvious that printers naturally copied the Indian cottons and did not attempt to make imitations of silks or brocades, and therefore those buying modern chintz and cretonne to go with old furniture, should avoid prints which are imitations of damasks and velvets, even if the designs are copies of materials of the right period.

The agitation against the use of prints at last reached a climax, the opponents of the " callicoes " were victorious, and in 1720 there was passed an Act prohibiting the use of all decorated cottons.[1] It was entitled :

" An Act to preserve and encourage the woollen and silken manufactures of this kingdom and for the more effective employment of the poor by prohibiting the use and wear of all printed, painted, stained or dyed callicoes in apparel, household stuff, furniture or otherwise after the twenty-fifth day of December, 1722."

This Act ordained that no one whatever should " expose for sale any printed, painted, stained or dyed callico, or any bed, chair, cushion, window curtain or other household stuff or furniture made up or mixed with any printed, painted or stained callico " for use in Great Britain.

The material prohibited was further defined as " any stuff made of cotton or mixt therewith, which shall be printed or painted with any colour or colours or any callico stitched or flowered in foreign parts with any colour or colours or with coloured flowers."

The denunciations of the law, however, had not much effect, and the fashionable world wore " charming chintz " while alive and was " laid out " in it when dead.[2]

[1] Geo. I., 1720, Stat. 1, c. 7.

[2] " Let a charming chintz and Brussels lace
Wrap my cold limbs and shade my lifeless face."
Pope, *Moral Essays*, 248.

PLATE XVI

Sprigged Chintzes, English Late Eighteenth Century

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

The Act was modified in 1736 to allow mixed fabrics with a cotton warp to be used, and many printers availed themselves of this permission. It was evidently made an excuse for printing a certain amount of pure cotton, as there are examples of cottons (such as that illustrated on Plate XLII.) which bear a date showing they were printed during the Prohibition.

Probably, however, the "chints" mentioned below had a linen warp, as its acceptance was obviously owing to its native origin.

Gentlemen's Magazine, 14th March, 1754:

"Mr. Sedgwick, a very considerable wholesale trader in printed goods, had the honour to present her royal highness the princess of *Wales* with a piece of *English* chints of excellent workmanship printed on a *British* cotton, which being of our own manufacture, her royal highness was pleased to say she was very glad we had arrived at so great a perfection in the art at printing, and that in her opinion it was preferable to any *Indian* chints whatsoever, and would give orders to have it made up into a garment for her highness' own wear . . . as an encouragement to the labour and ingenuity of this country."

That the Act was not an entirely dead letter is, however, clearly proved by the fact that prosecutions were not uncommon. Even as late as 1768, on the verge of its repeal, on the 9th August, two ladies were haled before the Lord Mayor and fined £5 for wearing chintz gowns.[1]

[1] *Gentleman's Magazine*, xxxviii. p. 395.

CHAPTER VI

THE DAYS OF FREEDOM

It must always be a most difficult matter for those responsible for the government of a country to take steps which, while they increase the wealth of one part of the population, bring in their train for others losses almost amounting to ruin. The struggle between the interests of the woollen manufacturers and the would-be cotton manufacturers and printers had been a very long one, but in 1774 it came to an end and the long-desired freedom to print and decorate fabrics of pure cotton was granted. From that year must be dated the real beginning of our vast cotton industry, because, not only was cotton permitted to be decorated in Great Britain, but calico was allowed to be manufactured here for the first time. The story of Arkwright and his struggles has often been told, and while his difficulties were by no means over when, in 1774, permission was first granted for calico weaving to be practised in England, one at least of the obstacles was removed.

Up till 1774 all cotton goods were subject to an excise tax of threepence on each square yard, and calico (which was all imported from India) was taxed sixpence. The excise tax of threepence still continued on all cotton, but the English calico was included at the same rate.

Taxes had also to be paid by the printers of cottons; they amounted to threepence on each square yard in 1774, and were raised by degrees in 1779 and 1782 to fifteen per cent. of the value.

This naturally made prices higher than they would otherwise have been, and prevented printed cottons being used by cottagers and thrifty farm-folk, who still continued to use woollen and

PLATE XVII

A Cotton Hanging, Printed in Pink

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

linen, both for household purposes and personal wear. These were both cheaper than cotton, especially as they could have them spun at home and woven into whatever was required. There was in many localities a weaver who turned the "homespun" thread into those hard-wearing, everlasting stuffs that farmers and workpeople handed on from father to son and from mother to daughter.

These taxes kept fluctuating from time to time, and as the industry progressed formed a most valuable contribution to the Exchequer, and the Government, realising that the cotton trade was a considerable source of income, ceased to discourage it, so that, though heavily taxed, it was not crushed out of existence, as at one time seemed probable. The export trade was fostered, and when in 1778 the tax was fixed at threepence halfpenny a yard all round on linen and cotton goods, this was refunded on goods sent out of the country, and, in order to encourage home manufacture, foreign materials printed in England paid double.

In order to supply the increasing demand numerous printing works sprang up, especially in the north. Almost all the earlier print works were near London. Richmond, Old Ford, Bromley Hall and West Ham (in Essex), and various places along the Thames and its tributaries, were the sites of the original calico-printers' shops. But towards the end of the eighteenth century the trade moved towards the north. Probably the cheapness of fuel was one attraction, but the large area of land required for the bleaching and drying of the enormous lengths of material that was used, made it imperative that sites should be sought where the required ground could be obtained at a reasonable rate. Communications too were, though not good, at any rate better than they had been, and it was not so necessary that manufacturers should all cluster round the capital.

These country manufacturers were energetic and capable business men, and were the first to take up any new invention and to adapt it to their needs.

One of the greatest changes that has ever taken place in the art of textile printing was the introduction of cylinders as a means of transferring the design to the material instead of blocks.

It will easily be understood that this invention effected something like a revolution in the printer's trade. Instead of having to adjust painstakingly the design to each application of the block, seeing that the pattern keyed with the previous portion and that it was straight on the fabric, the cylinder was rotated, the calico passed between the rollers, and at each revolution a complete repeat of the pattern was printed off.

Who was the inventor of this device it is impossible to say, neither has an exact date been authoritatively given. The principle must have been in the minds of many as one way of expediting printing, the slow hand process being quite insufficient to satisfy the increasing demand for printed cotton goods; but there were many difficulties to be overcome before it was commercially practicable, and doubtless many inventors were at work on the problem, arriving at fairly satisfactory results about the same time. Each manufacturer, too, desired to keep his own secrets to himself and would not publish abroad the fact that he had lessened the cost of production by mechanical means, fearing, no doubt, that his rivals would copy him and that customers would beat him down in price.

According to Persoz,[1] Charles Taylor and Thomas Walker printed from wooden cylinders in 1770. A Scot named Bell is also mentioned as having been the first to apply the principle successfully. He is said [2] to have sold his machine to the great firm of Livsay, Hargreaves, Hall & Co., about 1785. This must have been an improved version of an older machine.

The description of Bell's machine is as follows :

[1] *Traité théorique de l'Imprimerie des Tissus.* Paris. Victor Masson, 1846, quoted by Professor Forrer.

[2] Baines, *History of the Cotton Manufacture,* p. 265.

PLATE XVIII

Chintz Border, English Late Georgian

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

" A polished cylinder several feet in length (according to the width of the piece to be printed), and three or four inches in diameter, is engraved with a pattern round the whole of its circumference and from end to end.

" It is then placed horizontally in a press, and as it revolves the lower part of the circumference passes through the colouring matter, which is then removed from the whole circumference of the cylinder, except the engraved pattern, by an elastic steel blade placed in contact with the cylinder.

" A piece of cloth may thus be printed and dried in one or two minutes which, by the old method, would have required the application of the block 448 times."

At first only the outline was printed on the cylinder, the fillings being carried out by block printing, but in course of time machines were invented which printed various colours by successive cylinders, and ultimately numerous colours were printed at one operation. These mechanical improvements, however, were marked by retrogression from an artistic point of view. The patterns were of necessity a short repeat, rarely more than nine or twelve inches, and the designer had to confine his pattern rigorously to the space at his disposal. It did not matter so much for dress materials, but important furnishing designs could not be carried out thus, and have continued to be printed by the old method, where the best effects have been required, down to the present day, though the old dyes are no longer used.

A most interesting little book was published in 1789 by a man named O'Brien, called *A Treatise on Calico Printing*. He had himself been engaged in cotton manufacture and was well qualified to describe the trade as it then was—just at the parting of the ways. The processes he describes are the old ones with the madder colourings used with their attendant washings and boilings, and the printing is the old block printing of a hundred years before, but he knows of the new methods, though he ignores them as much as may be. Whether this is because he indeed knew but little of them, or, which is perhaps more likely, because he thought

the knowledge so valuable that he did not want it to be communicated to too many people, is not quite clear: whatever the reason, there is little about printing machines or the newly-invented dyes and colours. He was mainly writing for Londoners, as he says, of the new methods.

"Innovations particularly of a mechanical principle are spreading pretty widely in the country, and machines of various constructions are increasing about Town, and I venture many Town printers will hardly credit that engraved cylinders perform as expeditiously as the common pin ones; that a machine for block printing was invented and used some time with which anyone could print as easily as use a winch, and that in machine printing four cylinders may be used at once in different colours." As he points out, this mechanical reproduction was sure to lead to a lowering of the price, not only of the reproductions, but also of the originals, for he pertinently inquires: "What person would willingly give five or six shillings a yard if their very servants can have an imitation of or what has nearly the effect for two or three?"

Clearly the main result of the mechanical improvements was not finer workmanship or more beautiful effects, but the lowering of the cost of production, which continued until in 1835. Ed. Baines, Junior,[1] writes: "The humblest classes have now the means of as great neatness and even gaiety of dress as the middle and upper classes of the last age. A country wake of the nineteenth century may display as much finery as a drawing-room of the eighteenth; and the peasant's cottage may at this day with good management have as handsome furniture for beds, windows and tables as the house of a substantial tradesman sixty years ago."

It is interesting to have these notes by contemporary writers as to the classes who made use of the chintzes and cottons, as so often novelists and painters like to dress their dairymaids and

[1] *Cotton Manufacture*, p. 358.

PLATE XIX

THREE PRINT DRESSES, LATE EIGHTEENTH, OR EARLY NINETEENTH, CENTURY

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

country girls of the seventeenth and early eighteenth centuries in flowered muslins and " fresh print dresses."

Copyright was another point on which O'Brien has much to say. It is really extraordinary that before 1787 (when it was increased to three months) patterns were only copyright for two months, and it seems curious that manufacturers would not even wait that short time before copying a popular pattern, but risked lawsuits and penalties to take advantage of another man's success.

Different patterns were issued each year for dress stuffs. We are rather apt to talk of the fashions of our great-great-grandmothers as if they lasted unchanging for years, but in the matter of dress cottons there was a persistent call for new and varied designs. The range of colours which could be used for printing cotton was gradually being extended, and it was the constant effort of inventors to make it more complete. Green was a colour which resisted all efforts for a long time; sometimes experimenters thought they had discovered a fast tint, but their hopes came to nothing. Once a grant of £2000 was actually made to an experimenter, Dr. Richard Williams by name, who claimed to have at last found the secret of solid green and bright yellow dyes, which were indeed " fast." However, very shortly it was proved that his dyes were, as a matter of fact, fugitive. He claimed the support of several friends to whom he had given handkerchiefs which had proved quite satisfactory in wear. But, alas ! their evidence was of no use. The handkerchiefs were *pocket*-handkerchiefs, and though fast as far as soap and water went, to sunlight they were fugitive.[1]

The printers, in order to produce bright green, had to continue

[1] See *Journal of Society of Chemical Industries,* 1837, p. 645 : Charles O'Neill.

to use an impression of yellow over blue, until about 1809, when Oberkampf invented the long-sought-for solid green. The *Journal de Commerce* for the 18th of July, 1810, announces the fact in the following tones: "We are able to make the very important announcement that several lengths have been printed with a solid green in one single impression. This discovery is one of the most valuable instances of the application of chemistry to manufacture. A neighbour nation who are rivals has offered a large prize (two thousand guineas) to the discoverer of this colour. However, the discovery has been made in France, so the prize in England has not been won." This colour was brought to England by Samuel Widmer, a member of the Jouy firm, who communicated it to those English and Scottish firms who could in return show him some of the processes in which Great Britain was ahead of France. Paisley thus received the green colour, and also Manchester, where the machine for printing three colours simultaneously was shown to him in exchange. It was still a novelty to him, though it had been in use here for many years. By the same means he purchased permission to make drawings of a cotton-spinning machine from which the first to be employed in France was made in 1812.[1]

It is useful to remember that cottons printed with a single-colour green must be of later origin than 1810, though the reverse is not always the case, many block-printers using the two-coloured green for many years after this date. Where blue and yellow entered into the composition of, say, a group of flowers in natural colours, it, of course, did away with the extra printing of green if the colour were obtained by the use of the two colours superimposed. On the other hand, the solid green was invaluable for single-colour green prints. A dull greyish-green had been known previously which had been much used, but it was extremely subdued, almost dust coloured.

Turkey red was another colour which was much used for

[1] *Oberkampf*, by Labouchère.

PLATE XX

FINE GEORGIAN CHINTZ IN FULL BRILLIANT COLOURING

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

printing the smaller patterns which were popular in the early nineteenth century. They were favoured when a hard-wearing fabric was required, as they did not quickly show soil marks. The patterns were generally copied from Indian " pine " designs, and, according to our ideas, are not very beautiful. However, for generations these prints in colour, which are known as " Paisley " patterns, have found favour.

" Turkey red " has been known in Asia and Eastern Europe from early times, thence spreading to green about the last half of the seventeenth century. In 1760 Turkey red dye-works were founded in France at Rouen, and from thence introduced to Scotland; a Frenchman named Papillion, founding a Turkey red dye-works at Glasgow at the end of the eighteenth century.

An Example of a Print from Wood Blocks on Canvas.
The colours used are pigments. Dutch Seventeenth Century.

CHAPTER VII

HOW CHINTZES WERE USED IN ENGLAND DURING THE GEORGIAN PERIOD

ALL through the eighteenth century chintzes were used by well-to-do people for furnishing purposes. As we have seen, early in the century, the favourite fabrics were the lovely imported Indian fabrics and their imitations. The decrees against their importation seem to have considerably lessened their use for furniture for a time, only to be renewed with redoubled force later. But towards the middle of the century there arose quite a new kind of design which was entirely different from the Oriental patterns which had so long held sway. These new-fashioned prints were carried out in one colour only and were printed from copper plates. They were generally decidedly pictorial in character, and consisted of landscapes, pastoral or classical, Chinoiseries or figures in groups or singly. They resembled the engravings in the " Books of Ornaments " which were published about that time, showing sketches or more finished designs, intended as suggestions for craft workers. Individually these drawings and motifs are not without charm, though repeated *ad infinitum* they may easily be wearisome, but at their best they fall, by chance it would appear, into a not at all unpleasing series of lines. The resulting prints in reproductions in a soft tone of red or blue make a not bad background if printed on a textile ground which is of a soft creamy tone. On paper they are hard and glaring and should never be used.

Late in the seventeenth century European dyers had learnt, probably from India, the art of varying their work by using wax

PLATE XXI

Red Print, Dated 1761

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

and other matters to make the printed portions of the fabric non-absorbent, when the whole of the stuff was plunged into the dye; the wax was afterwards removed, the result being that a white pattern appeared on a coloured ground which was, in the earliest examples of this process, invariably blue; this method of ornament was known in England, it appears, somewhere about 1690 or earlier; thence it seems to have travelled to Switzerland, and to have reached Rouen by about 1709, and came into general use in the first half of the eighteenth century, wherever skilled dyers were at work. These early "reserve" patterns are no doubt the parents of those executed the reverse way, that is to say, a blue pattern on white ground, and Oberkampf *père* is generally credited with having been the first to bring the process into practical use. Once the principles of the method of printing these colours was discovered, it must have cheapened the production very much, as, of course, previously the fillings had to be applied by hand, black alone being printed, so no doubt these were the first coloured prints that were obtainable at something like reasonable prices. It would appear, too, that the Government, though prohibition was still in force, did not take any active steps against printers who produced these single-coloured wares; it may even have been considered that they came under the heading of self-coloured blue dyes, which were especially excepted from the general ban. They were very largely used for wall and bed hangings, and called forth the admiration of people who, at that time, were considered authorities on matters of taste. Mrs. Delaney, for example, sets the seal of her approval on them when she wrote while in Ireland at Delville during 1752: "Just here, Bushe made me go with her to Drumcondra, a mile off, to see a manufactory that is set up there of printed linens done by copper plates; they are excessive pretty."

Indeed one can well imagine they would much appeal to her taste; but very many of the designs of this period are too much of the "vastly genteel" type which made such a bold bid for the

favours of the cultured, who at this time were so very apt to judge all art of whatever kind by its literary merit.

Wall papers and printed hangings were executed from the same plates, and thus the whole room was carried out in exactly the same design. Horace Walpole had a room thus furnished at Strawberry Hill. It must have been very wearisome, one would think, but he was immensely pleased with it. Unfortunately he does not tell us where the printing was done. Professor Forrer suggests that Jackson of Battersea printed textiles as well as wall-papers, but there appears to be no record of his having done so. These self-colour designs are printed sometimes on cotton, sometimes on linen, and also on a mixture of cotton and linen to comply in all respects with the legal enactments. There must have been an immense variety of designs, and those who were careful about such details would be able to select hangings with suitable subjects according to the use and situation of the rooms for which they were intended. For best and state rooms they were hardly considered suitable, but their freshness and comparative cheapness made them eminently desirable for bedrooms and small sitting-rooms and cabinets. Blue and white, either in reserve or in blue print on a white ground, makes an exceedingly happy background for plain solid mahogany of the simpler types of mid-eighteenth-century furniture. Especially happy are those prints which have a somewhat vaguely defined little pattern suggesting a Chinese origin, or rather what an eighteenth-century Englishman *thought* was Chinese. It is very curious that with numerous authentic Chinese and Indian models of all kinds to copy from, the eighteenth-century designer in Oriental styles invariably preferred to evolve his patterns " out of his inner consciousness." For instance, Chippendale " Chinese " furniture is absolutely unlike anything ever made by a Chinaman, while Edwards and Darley drew metal-work which had nothing in common with any real Oriental work. However, there were the prints " in the Chinese taste " for those who wished to give an Oriental cast

PLATE XXII

Red Print, English Eighteenth Century

PROPERTY OF THE
MINNEAPOLIS
ATHENÆUM

to their rooms, and pastoral scenes for those who liked to furnish small country houses as rural retreats. Classical scenes, too, now made a great appeal, and the discoveries at Herculaneum led to numerous manifestations of a knowledge of bygone days which, as Jackson of Battersea says of his wall-papers, " may be as well shown by a print as by their possession of the original." This was, of course, a great advantage at a time when an acquaintance —if only a nodding acquaintance—with the classics was almost an essential part of the education of a well-bred man.

Towards the end of the century these self-coloured prints do not seem to have been produced in large quantities in England, but they were imported from France, Oberkampf doing a large trade with England. He made very special efforts to produce goods which appealed to the taste of his English public, coming across the Channel himself at times, and also sending emissaries to discover how best he might meet the taste of his *clientèle* over here, which was large, his goods being consigned to ten London houses.

Chippendale in his books does not suggest anywhere the use of cottons or linen prints, and it might perhaps not have been safe in his time to have done so *in print*, though no one seems to have taken much notice of the law in practice. For his more grandiose creations, it appears that heavy silk fabrics are far more in the spirit of the original conception of the designs than cotton prints, however elegant. Adam also says nothing of cotton prints, and they would not have been very likely to appeal to him, and indeed are quite out of keeping with the whole style of his art and architecture.

By the time the Hepplewhite book was issued cotton printing had come to its own. The Government had passed from an actively menacing attitude towards it, through a period of more or less indifference, to the realisation that in the once-despised cotton manufacture, with its numerous ramifications, there was a steady source of income to the Exchequer, and in 1774 printing on cotton was freed from all restrictions.

Cotton printers, who had only been waiting for their opportunity, seized it with avidity and poured out thousands of fine designs suitable for every purpose to which such fabrics could be put.

There are several references to the use of cotton in the book issued by Hepplewhite's widow Alice, in 1783, and they are of the greatest use in enabling us to give his furniture the upholstery which was intended when it was made.

Much of the furniture of the time was painted or, as it was then called, "japanned" in various light colours. Cream, buff, light blue, white, pea-green, and also black being favourite colours. Sometimes the paint was left plain, but, perhaps more often, decoration was added also in paint, either simple conventional ornament, lines, or garlands and bouquets of flowers. The instructions as to the upholstering of chairs of this kind runs as follows: "Japanned chairs should have cane bottoms with linen or cotton cases to accord with the general tone of the chair." We see sometimes in contemporary pictures and engravings that such covers were nailed on with close serried rows of brass-headed nails, but it is more in accordance with modern ideas, and quite in keeping with the period, to make covers of material which is so easily soiled as cotton or linen loose, so that they can be removed and washed.

Another suggestion for the use of prints does not sound attractive, and I have not come across a single chair so decorated, so perhaps the idea appealed as little to his contemporaries as it would to us.

"The back and seats (are) of red or blue morocco. In these backs, which are sometimes made a little circular, are frequently inserted medallions painted or printed on silk of the natural colours." If they were ever made, these would happily soon wear out!

He suggests window stools covered with cotton or linen to match the chairs. "The covering should be of taberras or morine of a pea-green or other light colour."

PLATE XXIII

Designs for Applied Borders

PROPERTY OF THE
MINNEAPOLIS
ATHENÆUM

Then follows some very handsome praise of the cottons then made which must have been a very good advertisement for the industry.

" The Manchester stuffs have been wrought into bed furniture with good success. Printed cotton or linen are also suitable; the elegance and variety of which afford as much scope for taste, elegance and simplicity as the most lively fancy can wish."

He tells us that " Valances to elegant beds should be gathered full, which is called a petticoat valance." Earlier most beds had had stiffened plain valances and sometimes panels. White dimity, " plain or corded," he tells us, was still fashionable.

At the same time that these English chintzes and other cottons were being so much improved, we must remember that the imported East India painted calicoes were still the most highly valued of all cotton furnishings; they were largely copied and still more largely smuggled; they were forbidden, of course, but by hook or crook they were obtained. Sometimes the means used to persuade Customs House officials to allow them to pass were very nearly akin to bribery. There is a correspondence extant between David Garrick and Sir Grey Cooper which shows how much they were desired, but even by using all his influence it was with difficulty that the great actor obtained permission to make use of a gift of curtains and bed hangings.

Copy of Draft Letter to Sir Gray Cooper.

Adelphi, June 2nd, 1775.

Dear Sir,

Not Rachel weeping for Children could show more sorrow than Mrs. Garrick—not weeping for her children, for children she has none, nor indeed for her husband, for, thanks to the humour of the times, she can be as philosophical upon that subject as any of her betters. What does she weep for then? Shall I dare tell to you? It is for the loss of a Chintz Bed and Curtains. The tale is short, melancholy, and is as follows. I

have taken great pains to oblige the gentlemen at Calcutta by sending them plays, scenes, and a rather better in return they have sent me Madeira and poor Rachel the unfortunate Chintz. She has had it four years, and upon making some alterations in our little place at Hampton she intended to away with her prohibited present. She had prepared paper, chairs, etc., for this favorite token of East India gratitude—but alas! as all human felicity is frail, no care having been taken on my wife's part, and some treachery being excited against her, it was seized, the very bed, by the coarse hands of filthy dungeon villains and thrown amongst ye smuggled [Lumber ?]. If you have ye least pity for a distressed Female—any regard for her husband—for he has a sad time of it, or any wishes to see ye environs of Bushey Park made tolerably neat and clean, you may put your thumb and finger to ye business, and take ye thorn out of poor Rachel's side.

Your ——

I was at your door yesterday and intended waiting upon you this morning, but was prevented by my plaguy disorder.

Kewlato, June 2nd, 1775.

My Dear Sir,

Your letter of this day pleases and hurts me at the same moment. The wit of it flashes in my eyes, but the tale gives me distress. It grieves me that Mrs. Garrick should have a wish which I fear it is not in my power to comply with. Upon such occasions I hate Acts of Parliament if possible more than ever, and I wish the Custom House and all their regulations, rules and forms and seising officers, Suits of Venditions, Exponas, etc., etc., etc. all at the Devil. I have, however, sent a supplication to my friend Stanley, the best humoured (tho' diligent and active) secretary that ever was at that board, to use his best offices to prevail with the Harpies to come into a reasonable composition for the restitution of the chintz, and yet the Linnen Drapers and Cotton Printers and all that cursed Bourgoisie I fear will be as

PLATE XXIV

David Garrick's Bed

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

powerful as they [are] merciless. But let Mrs. Garrick be assured that all that the secular arm can do shall be done and as strongly exerted as if the present had been from the Nabob of Our to our Most Gracious Queen. I regret the time I lose in memorials and reports for nothing more than that they deprive me of your company and conversation.

Mrs. Cooper was delighted with your letter and sends her best compliments and anxious wishes for the recovery of the Indian Gratitude.

And I am, my dear Sir,

Ever yours most faithfully,

GREY COOPER.

June the 5th, 1775.

MY DEAR SIR,

Let me return you my best thanks for your best endeavour on my wife's business. As you mention'd your application to my worthy friend Mr. Stanley, I have had the presumption to back it with a few doggerel verses. Montaigne observes that some men are sooner tickled than reason'd into kindness. I have try'd to draw my feather under the Secretary's nose in hopes that it will soften the rigour of his advice to the honourable Board: as I would not do anything in this matter without your knowledge I have enclosed ye feather wth. wh. I have try'd ye Experiment.— If amidst the Truthe and Lies that are daily arising about American affairs, my nonsense can steal you a few minutes from yr. cares, I shall have my desire, for there is no one wishes more warmly and sincerely and can do so little for yr. Cause (?) as, my dear Sir,

Most faithfully and gratefully,

Yours,

D. GARRICK.

THE PETITION OF D. G. TO HIS FRIEND E. STANLEY, ESQR., IN BEHALF OF HIS AFFLICTED WIFE.

. . . Earthly Power doth then show likest God's
When Mercy seasons Justice.—(*Shakespeare.*)

O, Stanley, give ear to a Husband's Petition
Whose Wife well deserves her distressful condition
Regardless of his and the Law's prohibition.
If you knew what I suffer since she has been caught,
On the Husband's poor head ever falls the Wife's fault,
You would lend a kind hand to the Contraband Jade,
And screen her for once in her illicit trade:
'Tis true, as 'tis sad, since the first Eve undid 'em,
Frail women will long for the fruit that's forbid 'em,
And Husbands are taught now-a-days spite of struggles,
Politely to pardon a Wife tho' she smuggles:
If their Honors and you, when the Sex go astray,
Have sometimes inclin'd to go with 'em that way,
We hope to *her* wishes you will not say nay.
'Tis said that all Judges this maxim should keep,
Not their Justice to tire, but at times let it sleep:
If more by the Scriptures their Honors are mov'd.
The Overmuch Righteous are there disapprov'd;
Thus true to the Gospel, and kind as they're wise,
Let their *Mercy* restore what their Justice denies.

D. G.

There is a Spanish proverb: "What woman wishes, God wishes," meaning, I take it, that persistent effort has its way in the end! We are glad to know that "little Davy's" efforts on behalf of his beloved wife met with success.

The bed and its original surroundings are now in the Victoria and Albert Museum. The furniture which goes with this historical set of Indian chintzes is of Oriental design, though "after the scole of Stratford atte bowe," as the Prioress spoke French. Still the whole effect must have been very quaint and taking when the ivory white ground of the chintz was fresh and new and the colours bright and undimmed, the self-colour green

PLATE XXV

English Design, Late Eighteenth Century

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

lining making the only large surface of a single tint against the vividly broken hues of the Chinese hand-painted paper which covered the walls. We may be sure that so thorough a stylist as the arranger of this room spread the floor with the gayest of Persian rugs. It must have been very striking and in its own unique way very charming.

With people willing to go to such endless trouble and expense for the real "chints" of India, they formed a most tempting field for imitation as soon as manufacturers had permission to make use of their knowledge how to obtain the colours. A ready market for their wares was at hand, and with the aid of the greatly improved appliances recently introduced, in addition to the single-colour prints, they launched into the production of multi-colour chintzes on a very large scale, conducting their business on lines never attempted in any English industry heretofore, employing numerous work-people, building large workshops and improving their business methods.

An extremely interesting book of patterns has recently been acquired by the Victoria and Albert Museum dating from the end of the eighteenth century and the first five years of the nineteenth. It consists of impressions from a manufacturer's stock of wood blocks. The outlines are in black, and the colours are painted in afterwards by hand; there are also some smaller and later designs adapted for cylinder printing.

It is a quaint example of the business methods of a period when even large industries were carried on in a somewhat leisurely way, and when, if you required a piece of cotton print for any purpose, you might either obtain it ready decorated or, if it pleased you better, take your own material and have it ornamented with the pattern chosen from those of which the manufacturer possessed the block. The custom was an old one and was dying out by the end of the eighteenth century, as the printers found it better and more paying to buy their calico in bulk and deal with it in quantities.

The manufacturer who made up this book of samples of his wares had a stock of nearly three hundred patterns, though in some cases the same blocks were used altered as to colouring and minor details. The book was evidently intended to be sent to the houses of customers, because the front page bears a notice begging for careful handling :

" Pray be careful to keep the Book Clean, the Patterns have cost a deal of Money, and are easily Spoiled by Children or Careless Persons putting their hands on them. It is therefore hoped and entreated, that the utmost Care will be taken to Sully the Patterns as little as possible, and when any Lady sends for a Sight of the Book, it is entreated she will give Orders That it be Returned immediately."

It is clear that it must indeed have " cost a deal of Money " to have all the blocks cut and the patterns prepared in such large numbers, and it is quite surprising that the printers were content to make the large outlay involved in view of the fact that the designs were most inadequately protected by copyright—only two months at first, which was afterwards increased to three months. After this period the patterns, in spite of the initial cost of evolving them from the first rough idea, might be copied wholesale by a rival, and there were firms who had no hesitation in thus pirating any conspicuous success. However, the fear of this occurring did not prevent manufacturers from getting together large and important collections of blocks, and buyers at the end of the eighteenth century had as varied a choice at their disposal as if they had lived at the present day.

It was not always impressions on paper that were thus used to advertise the wares of enterprising firms, in fact pieces of the actual fabric appear to have been more usual. In *Ackerman's Repository*, a periodical issued at the beginning of the nineteenth century, each issue was furnished with fragments of the latest hings in chintzes and other materials.

Among the patterns of the last quarter of the eighteenth century,

PLATE XXVI

English Cotton, Early Nineteenth Century

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

the copies of the Indian cottons predominate. It is natural that they should loom large in the perspective of the producer of cotton prints, as they were so very highly prized and constituted the ideal of the furnishing chintz; not only were the large palampores with their fine bold designs considered great treasures, but the smaller repeating patterns with their scrolling stems and small and varied flowers were a constant source of inspiration, either directly or through English embroideries based on them. They were, of course, much easier to do than the large patterns which required many more blocks to complete them.

There was a great liking for small panels of printed cotton and silk which were intended to be applied to different articles of plain material and surrounded often with embroidery. Some central panels had borders printed to match, so that bedspreads and hangings could be built up to the required size and shape by stitching the ornaments on to fabric either white or coloured. These panels appear to have come into vogue at the beginning of the nineteenth century, when the vogue for Indian designs was on the wane and a more severe and architectural type of ornament was preferred.

Sheraton does not specifically mention printed cottons, though he does suggest the use of small panels of printed silk. He illustrates chairs with small panels in the back in which a design of small figures is shown. He thus describes it :

" The figures in the tablet above the front rail are on French printed silk or satin sewed on the stuffing with borders round them. The seat and back are of the same kind as is the ornamental tablet at the top of the left-hand chair. The top rail is panelled out and a small gold bead mitred round and the printed silk is pasted on." The effect must have been extremely meretricious even if well executed, and very liable to go out of order.

The illustrations of such chairs in his books show classical and pastoral groups. One oval has a female figure contemplating an

urn. A settee is shown divided into three panels; the middle part of both back and seat has a figure subject, on either side are ornamental patterns, floral on the seat, and somewhat resembling the acanthus on the back. Here again examples of the treatment do not appear to have survived, though small panels not attached to anything are to be found. A charming example of such printing is to be found in the Victoria and Albert Museum. It is printed on linen from a copper plate and engraved in stipple; inscribed " London. Engraved and Published, Aug. 1, 1799, by Madame Bovè, No. 207, Piccadilly." It is a very prettily conceived subject of a lady weeping, consoled by a young girl. A small child is sitting at the side on a small stool, and there are various Greek vases and other adornments. The colouring is very soft and the prevailing tints are blue and yellow. Such an engraving, however, is not anything in the nature of chintz, though it happens to be printed on a woven fabric. It might just as well have been printed on paper, the technique being exactly of the same character. But though Sheraton does not expressly mention chintzes or other cottons, they harmonise extremely well with the type of furniture he illustrates, and were, of course, immensely used during the period at which his books appeared.

In the illustrations to these books stripes of different widths predominate, and the most typical furnishing chintzes of the time are, as one would expect, based on stripes, not as a rule of a quite plain kind, but floral patterns with a stripe effect. The designs of this kind were not stiff but quite characteristic, and showed very decidedly the influence of the Louis XVI style, which remained in vogue here long after it had been abandoned in France, where it was considered to savour somewhat of the *ci-devants*.

These striped effects were worked out, not only in the multi-colour prints which were so very popular, but also in the self-coloured designs printed from blocks. At this period Oberkampf still sent his goods to England whenever the political situation allowed it, but the designs were much less taking than they had

CHINTZ PANEL FOR SCREEN OR CHAIR, COMMEMORATING THE MARRIAGE OF PRINCESS CHARLOTTE OF WALES TO PRINCE LEOPOLD OF SAXE-COBURG, 1816.

PRINCESS CHARLOTTE
OF WALES MARRIED TO
LEOPOLD PRINCE OF
SAXE COBOURG MAY 2. 1816
DIEU ET MON DROIT
ICH DIEN

PROPERTY OF THE
MINNEAPOLIS
INSTITUTE OF ART

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

PLATE XXVII

1. Panel in Commemoration of George III, Jubilee, 1812
2. Rectangular Panel, Indian Colouring

been, though the colours in which the single-print cottons could be obtained were very rich and varied.

A great many English furnishing prints were of the " Persian " type; that is to say, they were small patterns on a darkish ground, generally buff. They are very rich and handsome, as the tint is well chosen for throwing up the brilliant colours in which the designs are carried out. The buff colour of the ground was probably selected because it harmonises so particularly well with the satinwood and light mahogany which was much used during the early years of the seventeenth century. A vermicular ground (generally carried out in a buff shade) was also often used. The vermiculations are, as a rule, printed all over the ground and the design printed over them. The idea is taken from the Indian chintzes, many of which have this ground, but in their case it is carefully drawn so as to leave the ground where the pattern comes clear.

CHAPTER VIII

PRINTED COTTONS IN FRANCE—OBERKAMPF AND THE "TOILES DE JOUY"

THE history of French chintzes (or, as they are called in France, *indiennes*) is summed up in a single name, that of "Oberkampf."

This extraordinary man, during his long life, saw the art of cotton printing in France pass from its half-strangled infancy to its full maturity in the early nineteenth century, by which time it had become one of the leading industries of France.

Indian chintzes had been introduced into France in the seventeenth century, and their history closely resembles that of their arrival in England. They swiftly became the height of fashion and roused the opposition of all interested in the woollen and silk trades. They were prohibited, but prohibition of their use helped the weavers little, as smuggled goods and even the inferior native copies were used on all sides. Prohibition of imports was in turn followed by prohibition of the cotton printing trade in France, with the consequence that smuggling and illicit printing were more lucrative than ever.

The French prints of the seventeenth and early eighteenth centuries, however, do not appear to have been of good quality, and all the leading improvements were introduced by Oberkampf either as the inventions of members of his firm, or adopted bodily from abroad.

The pre-Oberkampf period was principally one of copies of Indian goods; these being very fashionable and very expensive, it was naturally the aim of French workers to imitate them as closely as possible, using as a ground, linen or imported calicoes.

They do not appear to have attempted (as was the case in Switzerland and England) to obtain the effects in somewhat the same way as the Oriental workers did, by using madder and other fast-dye stuffs in conjunction with suitable mordants, but used the far simpler though, of course, much less satisfactory plan of simply printing the fabric with pigments, which, even if they were comparatively fast to light, were fugitive if washed. Colours thus applied always have a heavy dull look about them, by reason of the thickening medium used to make them work, and must from all points of view, except that of cheapness, have compared unfavourably with the imported *toiles peintes*. Still, when new and fresh, they no doubt resembled them sufficiently to enable those who wore them and used them for furnishing purposes, to feel that they were quite "in the mode," a consummation devoutly to be wished at all times by that section of the community which prefers veneered deal to solid oak and stucco to plain brick.

Certainly at the end of the seventeenth century all who had any pretensions to fashion had to obtain the admired decorated cottons, or confess themselves ignorant of the dictates of Madame la Mode. Molière, laughing at *Le Bourgeois Gentilhomme*, shows M. Jourdain displaying his ungraceful figure in a gown of Indian chintz.[1] His tailor had said that fashionable people always wore chintz dressing-gowns in the morning. Fashion's dictates had to be followed. So the poor fellow had to throw off his comfortable bourgeois attire and make himself ridiculous in the quaint garb which those of the Court alone knew how to wear with the requisite aplomb.

Enormous quantities of Indian prints were poured into the

[1] *M. Jourdain :* Je me suis fait faire cette indienne-ci.
Le maître à danser : Elle est fort belle.
M. Jourdain : Mon tailleur m'a dit que les gens de qualité étaient comme celà le matin.
Le maître de musique : Celà vous sied à merveille.
(Molière, 1670 : *Le Bourgeois Gentilhomme,* Act I. scene ii.)

country and used as hangings for rooms and beds and as covers for tables as well as for personal wear.

Some men are said to be born " in the purple." Oberkampf may be described as nurtured in a dyer's vat ! From his earliest years he was brought up amongst enthusiasts in the dyer's art, who found the principal interest of their lives in the pursuit of new methods and improved technique.

His grandfather was a dyer working at Vayhingen, then in the Duchy of Wurtemburg, and he brought up his son to follow his own profession. This young man, as was in those days the custom, travelled through Europe, seeking to perfect himself in his craft by studying it in other centres. During his wandering he learnt to produce patterns in " reserve "; that is to say, to print a design on the fabric before it was dyed, so that the dye would not " take " on the printed parts, but left the pattern showing in white on a blue ground. He interrupted his journeyings to teach his father this improvement on the plain colours with which he had previously had to rest content, and resumed his travels, settling ultimately at Wiesenbach, where he married, and where his son Christophe-Philippe (*the* Oberkampf) was born in 1738. Oberkampf *père* was an enthusiast about textile printing, however, and receiving the offer of a post in a works where woollen stuffs were printed in one or two colours from copper plates, he handed over his dyeworks to one of his brothers and transported himself and his family to Klosterheilbronn (1744). Here he was principally occupied with woollen materials, but he had opportunities of conducting experiments on cotton, and at last succeeded in carrying his efforts to a successful issue and succeeded in printing blue patterns on a white ground, a result long desired but hitherto found impossible.

His discovery led to his appointment to a position in a chintz works at Bâle, and the apprenticing of Christophe-Philippe to the same employment (1749).

The little fellow who thus started his life's work at the mature

PLATE XXVIII

1. Cotton printed at Nantes

2. French Cotton, "Chinoiserie"

MINNEAPOLIS
ATHENAEUM

age of eleven by stirring the colours in the tubs soon rose to more important duties. He was naturally intelligent and industrious, and when his father started printing works of his own in 1752 he was able to make himself very useful indeed. At the age of nineteen he felt his need for further knowledge, and in his turn set off on his travels, though his father naturally objected to losing so intelligent and willing a helper, and took an early opportunity of recalling him to instruct his younger brother in the new methods he had learnt.

Then he was once more released in 1758 and set off for Paris. Here he found his ignorance of the French language a great difficulty, but in spite of this he made his way to success.

He was engaged in a chintz printing works owned by a M. Cottin, who, anxious to improve the methods he employed, had sent to Switzerland for skilled craftsmen. His manufactory was situated in the Clos-Paon, a privileged quarter exempt from the restrictions which existed elsewhere. Here the work until his arrival was all done in fugitive colours. It is curious that this should have been the case, as sixteen years before Père Cœurdoux had written fully describing the Indian way of obtaining fast dyes. However, Oberkampf soon put this matter to rights and undertook the printing of calicoes in fast tints.

All this time prohibition was still in force, and the Customs Officers did not hesitate to proceed to the most extreme lengths in carrying out their duties, even tearing the forbidden stuffs from the shoulders of ladies who had the misfortune to meet them while thus clad. The influences of fashion must have been strong to have nerved people to face such very unpleasant encounters, but no doubt there was a certain *chic* in thus proving to all and sundry that the admired chintzes were the true, the beautiful, and—even better—the enormously expensive imported Indian *toiles peintes !*

In the face of such determined opposition and, perhaps, realising that much of the twenty millions of francs which it was

calculated was spent on imported and smuggled goods might, instead of going to foreign manufacturers, be retained for the profit of French pockets, the Government decided to remove the prohibition on calico printing in France (1759).

Oberkampf's star was in the ascendant. He was released from his contract with Cottin, who was practically bankrupt, and in partnership set up the historic manufactory of Jouy.

It was uphill work at first, and when in May 1760 Oberkampf printed the first piece of cloth he had to be draughtsman, engraver, printer and dyer. The premises were tiny and the tools used in the work had to be put aside each night in order that he might find room to spread a mattress to sleep on, while the only place for storage was under the table. But the works grew and prospered, financial difficulties were overcome by taking a new partner in 1763, and the firm was reconstituted under the title of " Sarrasin-Demaraise et Oberkampf."

In 1767 and thenceforth both ends of every piece were printed with the stamp of the firm : " Manufacture de toiles peintes et imprimées de Sarrasin-Demaraise et Oberkampf, a Jouy près Versailles. Bon teint." The Royal Arms were added in 1787. They were removed in 1792.

By this time the works were enormously enlarged and splendidly organised so as to permit the now numerous workpeople to carry on their duties under suitable conditions and proper supervision. The work was passed on from one department to another in a manner which seems to be the prototype of modern ideals of factory management. The different stages of carrying out the patterns were first the " printing " (*imprimer*), which gave the black outline, then the " filling " (*rentrer*), secondary printing, which might consist of two, three or four blocks, each used with a different colour, and the " painting," which consisted in applying by hand those colours (especially indigo blue) which were difficult to print from blocks.

Of the workpeople, the outline printers were the most skilled,

the secondary fillings at Jouy being often carried out by women who were specially trained and skilful. The painter girls often made their brushes out of their own hair.

There were many other departments, such as the bleaching works, the dying vats and the calendering shop, and at the heart of all was the office of Oberkampf, with his famous bell which he rang himself for nearly fifty years, summoning his people to work and dismissing them in the evening. It is significant of the vast extent of the business, that by 1767 it was necessary to have a guard-room for the Swiss guards who watched over the safety of the bleaching calico which lay spread out in the surrounding meadows.

Oberkampf was naturalised in 1770, thus obtaining all the rights and privileges of a Frenchman, which was a necessary step, as his success exposed him to numerous attacks by the little great ones of the neighbourhood, but nothing hindered the triumphant progress of the " Toiles de Jouy " and their maker.

In 1774 Oberkampf married, and the union turned out very successfully, though it really began rather inauspiciously.

Oberkampf had come to the conclusion that his younger brother Frederic ought to marry and settle down, though Frederic himself appears not to have been so certain about it. However, the senior and his partner's wife selected a very suitable *partie*, and all was settled. The two brothers paid their respects to the young lady, with the unexpected result that the elder brother became her husband.

Writing to his father he says: " I was married yesterday to the lady who was suggested as Frederic's bride. She suits me much better than she would have suited him, so I asked him to give way to me, which he has done, to my great joy." This was a very chivalrous way of putting it. A more truthful account might have said that the marriage was carried through by the elder brother in order not to break his word to the lady's family, Frederic not caring to carry out the contract.

His good faith was rewarded, as his family life appears to have been exceedingly happy until his wife's death in 1782.

Every year Oberkampf used to go to Lorient, to London and to Amsterdam in order to buy imported Indian cottons and to study the new patterns and fashions. The English market was extremely important, because there was a very large demand for his wares, which in some ways were superior to the home-made goods. Foreign orders poured in as well as those from nearer home.

Trianon, Saint Cloud, Bellevue and Montreuil had decorations of "Toiles de Jouy" which added to the demand. Marie Antoinette took an interest in Oberkampf, perhaps on account of his being, like herself, a stranger in a strange land. She sent for him to Trianon and personally inspected his work.

This Royal patronage culminated in 1783, when, by letters patent dated from Versailles, June 19, 1783, the establishment received the title of "Manufacture Royale." This was not a mere empty title, but carried with it important immunities and prerogatives.

It is interesting to note that at this date Jouy despatched its goods to the following cities: London (ten houses), Amsterdam, Antwerp, Bâle, Berlin, Brussels, Constantinople, Copenhagen, Frankfort, Hamburg, Lisbon, Luxembourg, Madrid, Salonica, Trieste and Île-de-France.

In 1785 he married again, and was again most fortunate. His second wife was a woman well suited to the position her husband was now taking, and was qualified to uphold the new dignity bestowed by Louis XVI, who, in 1787, conferred on him letters of nobility. These letters were published in 1788, and the assembly convoked to hear them read was probably one of the last of this character.

In 1789 the partnership with M. Demaraise was finally wound up, greatly to the regret of both partners, but the further expansions which were contemplated could hardly have been carried

PLATE XXIX

1. Design by Prud'hon

2. Red Print

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

out if it had continued; though as a matter of fact, the political circumstances delayed the immense extensions which had been proposed. During the early days of the Revolution commerce was practically at a standstill. Suddenly, however, there was a revival in the demand for printed cottons, and in 1790 the new buildings were begun, and Oberkampf, with his keen business sense, realising that it was better to have in stock stores of white calico which would not go out of fashion than paper money which was depreciating from day to day, bought every yard of imported cotton that was suitable for printing and warehoused it for further use. His operations were most successful, because simplicity becoming the only fashion, no one wanted silk and everyone dressed in cotton.

About this time he had a little difficulty about a pattern which was in preparation. It originally represented "Louis XVI restaurateur de la liberté." Quite of the moment when the engraving was begun, it took a year to complete, and the outlook was daily changing. To suit the circumstances Oberkampf had many of the details changed. "Religion" became "Liberty" by the simple expedient of doing away with her crucifix. Medallions representing groups of Cupids were altered to representations of the "Ruins of the Bastille," and so on.

But the general disquiet and the constant demands for money on behalf of the Government, "Don Patriotique; Souscription Patriotique, Emprunt Forcé," and so on, besides the constant depreciation in the assignats, caused Oberkampf to be somewhat anxious as to financial matters, especially as, in order to keep his workpeople employed, he continued to manufacture goods and to store them. No wonder that he was worshipped by his employees as little less than a demi-god. It was not until 1799 that he was reluctantly compelled to dismiss some of his men, but he was soon able to take them on again, as he found that he could keep his hands busy by printing calico belonging to merchants who paid him for the decoration of their cloth, and the business

of building and enlarging the works was even continued. By 1805 prosperity reigned once more; there was such a demand for cottons that they were bespoken while yet unfinished.

In 1806 yet another honour was bestowed on Oberkampf. Napoleon and the Empress Josephine, accompanied by a suite of thirty persons, paid a surprise visit to the factory. Napoleon was enormously pleased at seeing the swift working of the printing machines, one of them having been set in motion under his eyes. The white cloth entering on one side passed under the engraved cylinder and emerged on the other printed at the rate of seven and a half metres a minute. Then the cylinder was changed and another pattern was printed. The reserve cylinders, ranged in rows to the number of two hundred, attracted his attention, and on learning that twenty-five of them were made from the cannons he had taken in 1798 from the Pope, he was delighted and called his *aides* to him to laugh over what struck him as a great joke. As usual Napoleon overwhelmed everyone with a storm of questions, to which Oberkampf and his colleagues Petineau and Widmer were kept busy replying. The visit was a great success, and at its close Napoleon, pretending to notice for the first time that Oberkampf was not " decorated," took off " his own Cross of the Legion of Honour (a gold officer's crown) and gave it to him, remarking that ' no one was more worthy to wear it.' "

In 1809 Oberkampf received the Decennial Prize—*Grand Prix de* 1re *classe*—instituted for valuable service to science and art. The reports of the Jury and the Commission show the importance attached to his work, as shown in the following extracts :

" M. Oberkampf . . . commença son établissement il y a cinquante ans, et naturalisa en France l'art de toiles peintes qui avait été transporté en Europe des plus faibles commencements. M. Oberkampf éleva sa manufacture au plus haut degré de prosperité. Il y porta la perfection en reunissant tous les moyens que l'industrie avait acquis, soit par l'application de la chimie

soit par les procédés mécaniques,—Parmis les nouveaux procédés, on doit distinguer la gravure des cylindres et des planches de cuivre, l'impression d'un vert solide d'une seule application, et un grand appareil qui sert à l'application de la vapeur de l'eau a tous les procédés de teinture."

Napoleon again visited the works in 1810, bringing with him the Empress, at that time Marie Louise. Oberkampf being absent, he left commands that he should come and see him at Saint Cloud the following Sunday for the purpose of questioning him mainly on the subject of England and the cotton industry, his mind being full of the prohibition of English goods and the new Customs tariff, which amounted, in fact, to a commercial revolution.

Oberkampf was a piece on the board in the game he was playing against England—an important piece too in the Emperor's opinion.

" Vous et moi nous faisons une rude guerre aux Anglais; vous par votre industries et moi par mes armes." Then added after a moment's reflection : " C'est encore vous qui faites la meilleur." Both failed !

Jouy had seen its most prosperous days, and the last few years of Oberkampf's life were shadowed by grief and disappointment, though very many improvements in the mechanical side of the manufacture were made, principally introduced from England. Two members of the firm having received special permission from the Emperor to visit England in 1811, they managed to smuggle drawings of various useful machinery into France in the binding of a music portfolio, and they also brought patterns of new designs. One of these novelties was the two-cylinder printing machine, one cylinder being engraved to print the outline, the other with the design in relief applied the filling hitherto carried out by hand printing. But things were going badly, the workers had to be put on short time, and even for a time production ceased. Jouy was in the midst of military activities, and the disturbed condition of the country reflected itself in the state of trade.

The constant anxiety told on Oberkampf, by this time an old man, and in 1815, the year of Waterloo, he died. After his death the fabric that he had built up fell to pieces, and in 1843 the whole of the works were pulled down and sold.

During the whole period covered by Oberkampf's work at Jouy he was constantly introducing improvements in technique and carrying out novelties in designs. In almost every case he led the way both as to methods of manufacture and in providing new patterns, other French cotton printers following him closely. He does not seem to have desired striking originality; his aim appears to have been to study closely the needs of his patrons and to be ever ready with a supply of suitable goods. Similarly he made no revolutionary invention, but seized on ideas already in use and improved them and applied them to his own purposes; many of his great successes were developments of ideas already exploited in England and Scotland. The principal landmarks relating to new styles and methods which he introduced into France are briefly as follows :

Previous to 1759 it was forbidden to print chintzes except in a few privileged cases, though a certain amount of contraband printing was carried on. It was, however, done in fugitive colours until Oberkampf introduced fast dyes in 1759.

The introduction of the chintzes with small patterns in imitation of the imported cottons known as " Siamese " cloths. These were printed by Oberkampf on a mixture of linen and cotton and were known as " Toiles d'Orange de Jouy," 1763.

About 1760 the prints in red, afterwards to develop into the best known types of " Toiles de Jouy," were introduced. They were at first mainly Chinoiseries and were block printed.

In 1768 a new process of decoration was tried, especially on the small patterns. It consisted of filling in spaces in the blocks with pins or brass, which were placed in rows like bristles in a brush—they printed as tiny dots. Designs were also carried out entirely in *picotage*, as it was called.

PLATE XXX

Toiles de Jouy

1. Manufacturing Processes, 1783 2. The Wolf and the Lamb, 1804

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

In 1769 the principal novelties were the designs *en camaïeux*, that is to say, designs carried out in different shades of a single colour, at first generally china blue of fast dye.

In or about 1770 the patterns of the single-coloured prints became more varied, and landscapes with mills, pastoral scenes and such subjects were very fashionable.

In 1774 a new type of chintz was evolved which was a great success; it consisted of bouquets of flowers which were printed at some little distance from each other on a white ground expressly made in Switzerland.

The popularising of printed cottons by the cheaper production made possible by mechanical improvements naturally led to the use of designs which were suited to the taste of the moment, and numerous prints dating from about 1780 in single colours and also in two or three tints show that Oberkampf was appealing to a large market with less cultured tastes than before.

About 1783 an extraordinarily interesting design by Huet printed in single-colour red was issued, giving a view of the process in use at the factory. It shows the lengths of unprinted calico spread on the grass during bleaching; it is pegged out to preserve it from being blown away; near by is the small factory and the river—so essential to the enterprise, supplying as it did the necessary constant supply of good water. Workmen are shown busy damping and beating the cloth after it came from the boilers, and an assistant figures as carrying the cloth which has been prepared for printing back to the factory. These details are subordinate to the principal portion of the design, which displays a printer using the block-printing methods with his cloth spread on a table. Cloths hanging out to dry complete this part of the design.

The design " The Montgolfières " (the Ballonists) was issued in 1783.

The design " The Federation " was issued in 1790.

About 1791 the patterns principally in use were very striking,

such as large lozenges and zigzags—a very different class of taste had to be catered for.

In 1793 there was a large sale of Persian designs introduced for furnishing purposes in England.

In 1795 a very fashionable new style was introduced with a bronze ground closely covered with growing plants strewn with wild-flowers.[1]

About 1806 an old fashion was revived—the printing of white " reserve " on a blue ground by exactly the same method used by Philippe-Jacob Oberkampf in 1749, and by him taught to his son.

From about 1795 on there was an enormous output of those fabrics printed in a single colour from copper plates and cylinders which are so well known. They were exported in quantities to England and must have had a great vogue here. The pattern is printed from finely engraved copper plates, and the designs are of an essentially pictorial character; they are, however, executed on so small a scale that they " tell " merely as a diaper and break up the mass of large surfaces very pleasantly if used with the right type of woodwork.

Furniture of the type which followed the Louis XVI, and Empire furniture of the simpler type has a totally different appearance in a room hung with these cottons to its appearance when backgrounded with plain or paper-hung walls. However tightly chintz is stretched there is always a considerable play of light and shade, which gives a sense of style to the ensemble which is quite lacking in the individual pieces of furniture.

The designs are carried out in various colours, red, snuff-colour, blue, purple and dark brown all being favoured. The classical types were evolved under the Directorate and were among the happiest of this class of design.

In 1806 there was an Industrial Exhibition at the Louvre and a beautiful furnishing design, " The miller, his son and his ass,"

[1] *Oberkampf:* Labouchère.

PLATE XXXI

1. La Chasse, Designed by Horace Vernet, 1815
2. Red Print, Designed by Huet

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

printed in amaranth, was exhibited; it was an enormous success and had a long life as a successful pattern.

In 1809 a solid-green colour was introduced—previously green had been obtained by two printings, blue and yellow—but it has not really a better effect though it was hailed as an important invention. The broken colour produced by the over-printing one tint on the other had a much happier effect.

The works at Jouy naturally gave employment to numerous artists. It is not possible to connect the names of any particular designer with the earlier work, though a Mlle. Jouanon was working there as a flower painter in 1775, and was no doubt responsible for many of the charming floral patterns of that period; the others—amongst them, J. G. Vitrey, Garnier, Cavet, Pierrière, and many others—are but names, as their signature does not appear on the prints. Later it is possible to identify the work of several artists, as their original drawings are preserved in the Musée de l'Art Décoratif at Paris.

The best known is Jean Baptiste Huet, who designed Travaux de la Manufacture 1783, La Balançoire 1789, La Fountaine 1796, Le Lion amoureux 1798, Loup et l'Agneau 1804, Meunier, fils et l'âne 1806, Psyché et l'Amour 1810, and many others. His style is freer than that of Hippolyte Lebas, who, after Huet's death in 1811, designed very similar patterns for one-colour printing; they are, however, very often much cut up by his habit of enclosing the subjects in medallions and geometrical patterns. Les Colombes 1814, La Marchande d'Amours 1817, are among his best.

Penelli's best-known design is Scènes Romaines 1811. Others that can be identified are Paysage Suisse (Demarne 1814), Don Quixote (Hein 1813), Monuments de Paris and Monuments de Midi 1818, both by Lebas, and Costumes Militaires by Lami 1819, of which the decorative value is almost nil.

La Chasse by Horace Vernet shows hunting as practised at Versailles in 1815, while another print slightly later in date deals with an English hunt.

CHAPTER IX

DATES AND LANDMARKS IN THE HISTORY OF CHINTZES AND PRINTED COTTONS

	A.D.
Historical reference by Pliny	70
Portuguese traveller, Pero de Covilham, visits Calicut and describes its possibilities for European trade	1487
Vasco de Gama reaches Calicut	1498
Capture of a Portuguese vessel laden with Indian goods, including "callicoes," attracted English attention to the value of the Far Eastern trade	1592
Foundation of East India Company	1600
The East India Company allowed by Royal Proclamation to import amongst other things " painted Callicoes "	1631
Jerome Lanyer's patent	1634
Pepys buys a " chint " to line his wife's new study	1663
Dispute between Sir Martin Noell and the East India Company as to whether " callico be linnen or no "	1664
Grant to Will Sherwin of a patent for the invention of a new and speedy way for painting broadcloth " being the only true way of East India printing and stayning such kind of goods "	1676
Cotton first printed in England (Anderson's *History of Commerce*, Vol. II. p. 154)	1676
Reference by Sir Josiah Child to imported cottons being printed in England in imitation of Indian chintzes	1677
Revocation of the Edict of Nantes	1685
Callico Printing Works established at Richmond	1690
Neuhofer of Augsburg comes to England to learn the new way of printing	1690

	A.D.
Hooke presents a piece of fast-coloured printed chintz to the Royal Society	1696
Prohibition of importation of Indian chintzes	1700
Excise tax of 2*d.* per yard on home-printed callicoes	1702
Resist printing practised at Rouen	1709
Tax on home-printed callicoes increased to 6*d.*	1714
Many pamphlets for and against the "Callico trade published: *The Weavers' True Case*, *The Weavers' Pretences Examined*, *A Brief Statement of the Question between the Printed and Painted Callicoes and the Woollen and Silk Manufacture*, and others	1719
Prohibition of English printed cottons	1720
Permission granted to print on calicoes with linen warp	1736
Wilhelm Philippe Oberkampf born	1738
Publication of the letters of Father Cœurdoux fully describing the Indian processes of madder colours as used in their painted calicoes	1742
First textile printing works in France founded at Mulhouse (Alsace)	1746
Birth of the first Sir Robert Peel, the great calico printer	1750
Mrs. Delaney visits works at Drumcondra in Ireland where linen was printed from copper plates	1752
Oberkampf founds the works at Jouy	1758
Turkey red works established at Rouen	1760
Red print signed and dated R. Jones, Old Ford, 1761	1761
Red print "Chinoiseries," Collins, Woolmer	1766
Arkwright patents water-frame or throstle	1769
Spinning jenny patented by Hargreaves	1770
Taylor and Walker use wooden cylinder printing machine	1770
First cotton printing works at Glasgow	1771
Repeal of prohibition of home-printed calico and excise tax of 3*d.* per yard	1774
Duty raised	1777

	A.D.
Crompton patents the mule jenny	1780
Duty again raised to 15 per cent. of value	1782
Calico printers obliged to obtain a licence	1784
Cartwright invents the power loom	1785
Livesay, Hargreaves, Hall & Co.'s Print Works at Mornsey near Preston founded	1785
Ehrhardt's Printing Works founded at Chelsea	1786
Copyright increased to three months	1787
Tax of 3½*d.* on all linen and cotton fabrics for home consumption instead of former rates	1787
O'Brien publishes *Calico Printer's Assistant*	1789
Nicholson's patent improved cylinder machine	1790
Oberkampf introduces solid-green printing	1809

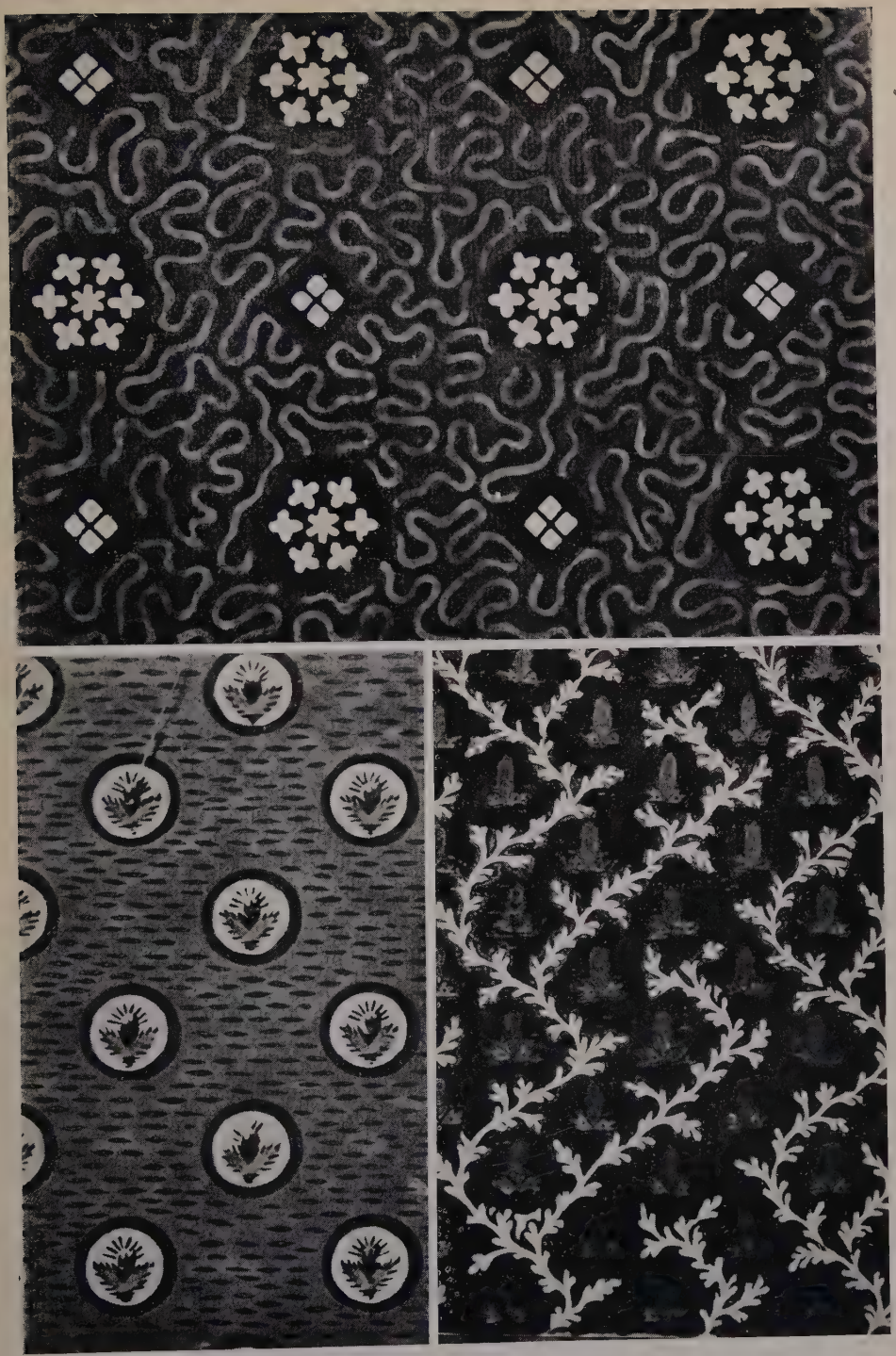


PLATE XXXII

THREE DRESS PATTERNS ON DARK GROUNDS, EARLY NINETEENTH CENTURY

PROPERTY OF THE
MINNEAPOLIS
ATHENAEUM

CHAPTER X

SOME BOOKS OF INTEREST TO LOVERS OF OLD CHINTZES

WHILE there are very many books treating of calico printing and weaving, most of them are purely technical works and of no interest to those readers who are chiefly concerned with the decorative qualities of the fabrics of bygone days, and there are singularly few volumes in which much is to be found that is of any use to the furniture collector or the lover of old-time customs. The following in their several ways will perhaps be most likely to be helpful:

Baines (E., jun.): *History of the Cotton Manufacture.*

O'Brien (C.): *Treatise on Callico Printing*, 1789–91.

Papillon (S. B. M.): *Traité historique de la Gravure en Bois*, 1766.

Hepplewhite (A.) & Co.: *Cabinet-Makers' and Upholsterers' Guide*, 1785.

Clougeot: *Revue de l'Art ancienne et moderne*, Vol. XXIII; *Les Toiles de Jouy*, 1908.

Oberkampf, by Labouchère; *La Toile Peinte en France*, by Depitre, 1912.

Forrer, Professor: *Die Kunst des Zeugdrucks* and *Der Zeugdruck.* These last have most interesting and valuable illustrations. They are in German.

Les Imprimeurs des Tissues (in French).

Leland, Hunter: *Decorative Textiles.*

Hadaway, W. S.: *Cotton Painting and Printing.*

Lettres Edifiantes, containing the account of the Indian method of producing printed calicoes, by Father Cœurdoux, 1742, of which a translation is given in the Appendix to this book, p. 81.

Baker (G. P. F.) has brought out a most magnificently illustrated work on Indian chints containing much very valuable information on the subject. It is possible to obtain an excellent idea of Indian cottons from this beautiful book without seeing the originals.

In addition, if in any way possible, visits should be made to the Textile Department of the Victoria and Albert Museum to examine the collection of Egyptian printed linens and European and other printed cottons, to the Wood-work Department, where the Garrick bed with its original chintz equipment is on view, and to the Indian Section, where a fine collection of Indian painted cottons is to be found. Many of them are examples such as were used for furnishing purposes in the seventeenth and eighteenth centuries.

APPENDIX

TRANSLATION of the account given by the Jesuit priest, Father Cœurdoux, of the Indian traditional methods of producing fast-coloured decorated cottons. Included in the collection of letters printed under the title of *Lettres Edifiantes.*

Aux, Indes Orientales,
c. 18 Janvier, 1742.

MON REVEREND PÈRE,

You have asked me in many of your letters to tell you of any discoveries I might make in this part of India, and I have not forgotten your request. You said you were sure that information might be obtained here which ought to be known in Europe, instancing anything which would contribute towards the advancement of Science and the perfection of Art.

I should have done this sooner, if my work had not occupied almost all my time. At last, having a little leisure, I have made use of it to find out how the Indians make those beautiful fabrics which are dealt in by the Trading Companies which cross the ocean from the most distant parts of Europe to obtain them from these remote regions.

These cloths are chiefly valuable because of the " vivacity " (if I may so express it) and the lasting quality of the colours with which they are dyed, which, far from deteriorating when washed, only become more beautiful. It is this quality, which Europeans have not yet succeeded in imitating, that I now have learned how to obtain.

This is owing to no lack of research on the part of our able men of science, nor of want of skill on that of our workpeople, but it really appears that the Author of Nature, wishing to compensate the Indies for the advantages which Europe possesses over these

countries, has given them ingredients (more especially water) which contribute to the beauty of the mixture of dyeing and painting by which these Indian cloths are ornamented.

What I am going to tell you, Reverend Father, about these Indian Paintings has been learnt from certain neophytes skilled in this kind of work whom I have recently baptised. I have questioned them on various occasions, and apart from one another, and it is their replies that I send to you.

I

Before beginning to make painted linens it is necessary to make the following preparations :—

1. Take a piece of new linen, fine and closely woven (the most usual length is nine cubits). Half bleach it. (I will say later how to do this.) Take about twenty-five of the dry fruits called Cadou, or Cadoucaïe; or, to be more exact, the weight " palam." This Indian weight equals an ounce and an eighth, hence fourteen palams and a quarter equal a pound. Break up the fruit and remove the stones, which are of no use.

2. Reduce the dry fruits to powder (in order to do this they use a stone cylinder in the same way that pastrycooks do when they roll out their paste).

3. Sieve this powder, and put two pints, or thereabouts, of Buffalo milk to it, increasing the quantity of the milk and the weight of the Cadou according to the quantity of the cloth.

4. Soak the cloth in it until it is thoroughly wet through with the milk. You then remove it, and wringing it out, put it in the sun to dry.

5. The following day you rinse the cloth in ordinary water, wring out the water, and after drying it in the sun, leave it in the shade for a quarter of an hour at least.

After this preparation, which may be called internal, you pass

to another which I may call external, because it concerns the surface of the cloth.

In order to render it smoother, and to facilitate the use of the paint-brush, they fold it in four, or in six, and with one piece of wood they beat it on another very smooth piece, taking care to beat it equally all over, and when one part is sufficiently beaten, they re-fold it, and recommence the operation.

Here, Reverend Father, it is well to make a few notes about Cadou which you may find of some use.

1. The fruit is found in woods on a medium-sized tree. It is found nearly everywhere, but especially in Mallaialam, a mountainous district, as the name signifies, which occupies a considerable part of the coast of Malabar.

2. This dry fruit, which is as big as a nutmeg, is here used by the doctors, and enters especially into remedies given to newly confined women.

3. It is extremely bitter; however, when one keeps a piece of it in the mouth for some time it acquires, some say, a taste of Liquorice.

4. If, after having moistened it slightly in the mouth, and then broken a piece, you take it between the fingers, you find it very sticky. It is largely to these two qualities—bitterness and stickiness—that they attribute the fastness of Indian colours. But *especially* to the bitterness. Such, at least, is the idea of the Indian painters.

For a long time the art of fixing colours has been sought for in Europe, to give them that fastness which is so admired in Indian cloths. Perhaps it may be mine to discover the secret; at least for some colours, by making known Cadoucaïe, and above all its principal quality of bitterness.

May we not find in Europe fruits similar to these? Gall nut, dried while immature; the rind of the Pomegranate may have many of the qualities of Cadou.

I add to what I have just said some experiments I have made with the Cadou.

1. Lime, steeped in an infusion of Cadou, gives a green. If there be too much Lime it gives a brown. If one pours on this brown dye a large quantity of the infusion, the colour appears whitish at first, and after a little the Lime precipitates itself to the bottom of the receptacle.

2. White linen soaked in a strong infusion of Cadou becomes of a very pale yellowish tint, but when mixed with Buffalo milk the linen comes out a rather pale orange.

3. Having mixed a little European ink with an infusion of Cadou, I remarked that in many places there was a bluish film similar to what one sees in ferruginous waters.

It would be easy, even in Europe, to make experiments with the Cadou itself, as it would be easy to import it from the Indies. This fruit is very cheap, and one gets thirty of them for a *sol* of our money.

The reason they prefer Buffalo milk to that of the cow is because it is richer and more unctuous.

This milk has the same effect on cloth as gum, and the other preparations that they use on paper in order that it may not blot. However, I find that our printer's ink used on a cloth prepared with Cadou does spread, and even penetrates to the other side, and the same thing happens with the black paintings of the Indians.

It must be noted that every kind of wood is not suitable for beating and polishing the cloths. Generally the wood upon which they are placed, as well as the beater, is made from the Tamarind Tree, but sometimes they use a tree called " Porchi," because these woods are extremely close-grained when old.

The beater is called a Cottapouli; it is round and about a cubit long, and as thick as a man's leg, except at the handle end.

Two workmen face each other, and beat the cloths with

alternating strokes. The experienced eye informs them when the cloth is sufficiently polished and lissom.

II

When the cloth has been prepared thus, the flowers and other things to be painted on it must be drawn. The Indian work-people have no peculiar method. They use the same as our embroideresses. The painter draws his design on paper, and pierces the principal lines with a fine needle. Placing the paper on the cloth he pounces the design. That is to say, he passes charcoal powder tied in a knot of muslin over the pricked holes, and thus the design is transferred to the cloth. Any kind of charcoal will do, except that of the Palm, which, say the Indians, tears the cloth.

Lastly, they follow these lines with a paint-brush and black or red colour, and the work is outlined.

III

Now comes the task of adding colour to the design. The first which is applied is the black. This colour is not much used except for certain details, and the stalks of flowers. It is prepared thus :—

1. They take some iron dross, and knocking the pieces together to cause the less solid parts to fall off, they retain the large pieces, which are about nine to ten times the size of an egg.

2. They put with it several pieces of iron, old or new, it does not matter which.

3. Having placed the iron and the dross on the ground, they light a fire above it. The best fire is made with Banana leaves.

4. They put the iron and dross into a vessel which holds about eight to ten pints, and pour on to it hot Kanji. This is the water

in which Rice has been boiled, and care has to be taken that there is no salt in it.

5. After having exposed the whole to the sun for a day, the Kanji is thrown away and the vessel filled with Palm wine or Coco wine, known as Callou.

It is again placed in the sun for six to eight consecutive days, when the colour used to paint black is ready for use.

There are some observations to make on this preparation.

The first is that one must not put more than four or five pieces of iron into eight or nine pints of Kanji, otherwise the dye will redden and cut the cloth.

Second, with regard to the quality of the Palm, or Coco wine, which sours easily in a very short time, they use it instead of yeast to raise their dough.

The third is that they prefer the wine of the Coco tree to that of the Palm. And the fourth, that failing these they use Kevarou, which is a small grain used as food by many people of this country. This grain resembles Turnip-seed in colour and size, but the stem and leaves are quite different. They also employ the Varagou, another native fruit, in preference to the Kevarou. They take two handfuls, and cook them in water which they pour into the vessel containing the iron and the dross. They add lumps of Palm sugar about the size of two or three nutmegs, taking care not to put more, or the colour will not stand.

The Fifth is that to improve the colour they mix the Callou with the Kevarou, or the prepared Varagou.

The Sixth, and last, remark is that this colour does not appear very black, and that it is not fast, except on a cloth prepared with Cadou.

IV

After having drawn, and painted with black, all the parts required, the red outlines of the flowers, and of other things which should be drawn in this colour, are added.

The blue, which requires a great deal of preparation, is also applied.

Firstly the cloth is put into boiling water, and left for half an hour. If two or three Cadous are added to the water the colour will be improved. The cloth is soaked all night in water in which the droppings of sheep or goats have previously been steeped. Next day it is washed, and exposed to the sun.

When the Indian painters are asked what purpose is served by this last operation, they reply that it removes the qualities imparted by the Cadou, and that if this had been retained, the blue, which is now about to be applied, would become black.

Another reason for this operation is that it whitens the cloth, for, as before remarked, it was only half bleached at the beginning. In exposing it to the sun, it should not get entirely dry, but should be sprinkled with water from time to time through a whole day. Then it is beaten on a stone, but not with a beetle, as in France. The Indian method is to fold it several times, and to beat it heavily with a stone, using the same movements as do locksmiths and blacksmiths, when striking their large hammers on an anvil. When the cloth is beaten enough in one part they continue beating it in another. Twenty or thirty blows are enough at this time. When this is done the cloth is again soaked in rice-water. If they have it they put some Kevarou to boil on the fire as if it were to be cooked, and before the water thickens too much they soak the cloth, remove it, dry it, and beat it with the Cottapouli as they did at the first operation in order to make it smoother.

As the blue is not applied with a brush, but by soaking the cloth in prepared Indigo, it is necessary to coat the cloth with wax all

over except on those parts which are already black, and those where blue or green are to appear.

This wax is applied with an iron brush, as lightly as possible, on one side only, taking care that no part remains uncoated, except those that I have mentioned. Otherwise there will be blue marks which are uneffaceable. The cloth is then exposed to the sun, taking care that the wax only melts enough to penetrate to the other side. It is then turned over, and rubbed briskly with the hand.

The better way is to employ a round-bottomed copper vessel, which spreads the wax all over, even to those parts which on the other side should be dyed blue. This preparation being completed the painter hands on the cloth to the blue dyer, who returns it after some days, for it must be noted that it is not the ordinary painters, but special workpeople, or dyers, who carry out this work.

Having asked the painter if he knew how to prepare the Indigo, he told me he did, and described it to me in the following manner. Perhaps you may be able to compare it with the methods used in the American Islands. Here they take the leaves of the Averei, or of the Indigo, well dried, and reduced to powder. This powder is put into a large vessel filled with water. They beat it in the sun with a bamboo split into four which has the four extremities extended apart.

The water is then allowed to escape through a little hole in the bottom of the vessel, at the bottom of which is the indigo. It is taken out and broken into pieces the size of a Pigeon's egg. They then spread ashes in the shade, and on these ashes they lay a cloth upon which the Indigo dries. It is then ready for use. After that it only remains to prepare it for the cloths which are to be dyed.

The workman, having powdered sufficient Indigo, puts it in a large earthen vessel which he fills with cold water, adding to it a proportionate amount of Lime, also powdered. Then he examines

the Indigo to make sure it is not sour—in which case he adds more Lime, as much as is necessary to make it lose this smell.

Then taking some grains of Tavarei, about a quarter of a bushel, he boils them in a bucket of water for a day and a night, keeping the cauldron full of water. He then turns all (grain and water) into the vessel containing the Indigo. This dye is kept for three days, care being taken to mix it well together, stirring it three or four times a day with a stick. If the Indigo again becomes sour, more Lime is added.

The blue dye being thus prepared, the cloth is immersed after being folded in two in such a way that the right side is outward, and the wrong side within. It is left to soak for about an hour and a half, then it is removed to a suitable place. You can see, therefore, that the Indian cloths should rather be called " dyed " than painted.

The lengthiness and variety of the processes for blue dyeing gave rise to a difficulty which I laid before the painter.

" Could not," I said, " all the flowers be painted blue with a brush, especially when there are only a few of them in the piece ? "

" It certainly could be done," he replied, " but the blue would not be fast, and after being washed two or three times would disappear." I asked him to what he attributed the fastness of the colour, and he unhesitatingly replied to the Tavarei seeds. This seed is native to the country; it is light brown, or olive colour, cylindrical, a line long, and split at the end. It is difficult to break with the teeth, insipid, and leaves a slight bitterness in the mouth.

After the blue, the red must be added, but first the wax must be removed from the cloth. It must be bleached and prepared to receive this colour.

The way to remove the wax is to put the cloth in boiling water; the wax melts, the fire is slackened, in order that it may solidify, and the wax is removed very carefully with a spoon; the water is again brought to the boil, and what remains of the wax is removed.

Although the wax becomes very dirty it may be used again for the same purpose.

In order to bleach the cloth it is washed in water, and beaten nine or ten times on a stone, and immersed in fresh water in which some sheep droppings have been soaked. It is again washed, and spread out in the sun for three days, and sprinkled with water as before.

They soak an earth called " Ola," which is used by the washermen, in cold water, and immerse the cloth in it for about an hour, after which they light a fire under the vessel, and when the water begins to boil they take out the cloth, and wash it in a pond, on the edge of which they beat it four hundred times on a stone, and then wring it thoroughly. Then it is soaked for a day and a night in water in which has been mixed a little of the droppings of a Cow, or female Buffalo. After that it is again washed in the pond and spread for half a day in the sun, watering it slightly from time to time. It is again put on the fire in a vessel of water, and when the water boils it is once more washed in the pond, beaten a little, and dried. Then, in order to make the cloth ready to receive the red colouring, the operation of Cadoucaïe must be repeated as before. That is to say, the cloth is soaked in a simple infusion of Cadou; it is then washed, beaten on a stone and dried; after this it is soaked in Buffalo milk, in which it is stirred, and rubbed with the hands in order that it may be thoroughly wet through. They then remove it, wring, and dry it.

Then, where it is necessary to have white marks, such as pistils, stamens, and other details, in the red flowers, they are painted with wax, after which the red dye, which has been previously prepared, is painted with an Indian brush.

The red is often applied by children, as it is not a difficult task, unless a very perfect piece of work is required.

Let us now see how this red colour is prepared. Take bitter water, that is to say, the water of certain wells which have this taste. Into two pints of water put two ounces of powdered Alum,

add to it four ounces of the red wood called Vartanqui or Sapan wood, also powdered. Let it stand in the sun for two days, taking care that nothing falls in to soil it, or the colour will be weakened. If the red is to be deeper add more alum, if lighter add more water, in order to obtain the different tints and shadings of colour.

V

To obtain a colour like wine lees, rather inclined to violet, you must take one part of the red, made as just described, and one part of the black described earlier. Add an equal part of rice-water which has been kept three months, and mix it until the required colour results.

There is a ridiculous superstition amongst these Gentiles on the subject of sour rice-water. It is that anyone can use it himself any day of the week, but on Sunday, Thursday, and Friday they refuse to give it to anyone who is short of it, because they say it would drive their God out of the house.

When Kanji vinegar is unobtainable, they use the vinegar of Callou, or of Palm wine.

VI

Different colours may be made based on red which it is useless to describe here. It is enough to say that they are painted the same time as the red, that is to say, before passing to the operation of which I am going to speak, after I have made some observations on the foregoing.

1. Wells of bitter water are not common, even in India. Sometimes there is only one in a town.

2. I have tasted this water, and do not find the quality attributed to it, but it seems inferior to ordinary water.

3. Some people say bitter water is used to improve the colour of the red, but rather more commonly it is said that it is used to make it fast.

4. It is from Acken that fine quality Alum and Sapan wood is brought to the Indies.

But whatever virtue lies in this bitter water it would neither make the colours fast nor beautiful if they did not add the dye of Imbouré.

This is more commonly called Chaïaver, or Chaïa root. But to make use of this the cloth must be washed in the pond in the morning, dipping it several times in order to soak it thoroughly, which is not easy because of the slight greasiness caused by the Buffalo milk previously used. It is beaten thirty times, and half dried. Whilst the cloth is being prepared they also prepare the Chaïa root thus : It is dried, and reduced to a very fine powder in a mortar of stone, not wood, and a little bitter water is thrown in from time to time.

Take about three pounds of this powder and add it to two buckets of tepid water, stirring it a little with the hand. This water becomes red, but rather an ugly colour; its purpose is to bring other reds to perfection. The cloth must be plunged in this, and stirred and turned for half an hour, while the heat is increased beneath the vessel, and when it becomes too hot for the hand, those who take particular pains that their work should be clean and perfect, remove the cloth, wring and dry it. The reason of this is that during the painting of the red it is difficult to avoid making blots here and there. It is true that the painter does his best to remove these, as one might do when writing, but there still remain some traces which are rendered more apparent by the infusion of Chaïa root, and therefore they take out the cloth as I have said, and remove them as best they can with a half lemon.

This done the cloth is put back into the dye, and the heat

increased until the hand can bear it no longer, turning and returning the cloth for half an hour.

At evening the fire is made up, and the dye is boiled for an hour, or thereabouts, the cloth is removed, wrung out, and kept damp until the next day.

Before passing on to the other colours it is well to say something about Chaïa. This plant is wild, and it is not necessary to sow it to supply the quantity required. It grows about half a foot high; the leaf is light green; about two lines wide and five or six long; the extremely small flower is bluish. The seed is about the size of that of tobacco. This little plant has a tap root running sometimes to a depth of nearly four feet, but those that are about a foot long are the best. Though the main root is so long, the side roots are few and small. It is yellow when fresh, becoming brown on drying. It gives a red colour to water only when fresh. On this head I noticed a point which surprised me. I had made a red infusion which was accidentally spilt during the night. On the following day I was surprised to find that at the bottom of the vessel some drops of yellow liquid had gathered. I suspected that some foreign body had caused this change of colour, and spoke of it to a painter, who told me that it only indicated that the Chaïa was of good quality, and that the water often takes the colour of saffron. I also noticed a surface film of a very fine violet on the overturned vessel. This plant is sold dry in bunches; the tops are cut off, as only the roots are used.

As the cloth had been entirely immersed in the dye, and had soaked in the colour, the following operations can be carried out without any danger of damaging the reds.

They are the same that have been already described, that is to say, the cloth is washed in the pond, beaten ten or twelve times on the stone, bleached with sheep droppings, and on the third day soaked, beaten, and dried, being sprinkled with water from time to time. It is kept damp during the night, and washed the next day, and dried as on the day before. At last, at noon, it is

washed in hot water to remove all soap, and any dirt which had attached itself to it, and thoroughly dried.

VII

The green colour is prepared thus : Take a palam, or a little more than an ounce of Cadou flowers, as much of Cadou, a handful of Chaïaver, and, if a very fine green is required, a Pomegranate rind.

Powder them, and put them in three bottles of water, and boil them until the quantity is reduced to three quarts, and pour into a vessel through a linen cloth. Add half an ounce of Alum in powder, stir for some time, and the colour is ready.

Painted over blue, this colour gives green. For this reason the worker who dyes blue is careful when painting on the wax to leave those parts clear of wax which should be green, so that the cloth already dyed blue should be in a proper state to receive the green in its turn. If not painted over blue, it would give yellow on a white cloth.

This colour, however, is not fast, like red and blue, and after several washings disappears, leaving only blue. There is, however, a way of fixing the colour so that it will last as long as the cloth itself.

Take a Banana bulb, peel it while fresh, and express the juice. Add four or five spoonfuls of this juice to a bottle of green dye. It will make the green permanent, but will spoil the beauty of the tint somewhat.

VIII

There remains but the yellow, which will not require much explanation. The same dye used for green by painting over blue, serves for yellow by painting on a white ground, but it is not permanent.

However, if but little soap be used in washing these cloths,

or if they are washed in water acidulated with sour milk, or lemon juice, or soaked in water in which cow droppings have been mixed and passed through a linen cloth, these fugitive colours will last a long time.

IX

In conclusion a few words may be said about the pencils used by the Indians. They are made of a little piece of Bamboo, pointed, and slit for about an inch from the end. Fastened round them is a piece of stuff soaked in the colour they are using, which is squeezed to make it run as required.

For wax they use an iron pencil about three finger-breadths long, which is thinner towards the top, and is inserted in a bit of wood which forms a handle.

It is slit at the bottom, and forms a circle in the middle round which is fixed a bundle of hair about the size of a nutmeg, soaked in hot wax which runs little by little down to the point of the pencil.

Such, Reverend Father, is all I have been able to gather as to the fabrication of the painted cloths of the Indies.

I do not know if I have been more successful in my discoveries than my predecessors, but, as they neither knew the language, which is so absolutely necessary when conversing with the painters, nor the customs of dealing with them, and as their position might naturally cause suspicion in the timid natives, I doubt their having carried out their orders as to this matter successfully.

I do not wish to guarantee the exact truth of all that I have reported; it would be difficult to avoid allowing some errors to creep in when dealing with those who know better how to work than how to explain, but, as I have consulted many painters, it would be difficult for them all to conspire to deceive me, and it is unlikely that I am far from the truth.

I am, etc., etc.

GLOSSARY

Atlass. An Indian fabric with a cotton warp or back and a soft silk woof with a satin surface, woven in a striped pattern.

Alum. One of the principal mordants used by the calico printers of India.

Arkwright. Inventor of the water frame (1769) and of the power loom (1785).

Bandana dyeing. This style of dyeing is ornamented with white spots, by preventing the colour getting to the material by tying it up into small tight knots.

Batiks. " Java girdles " are the chintzes called by the Javanese *batik*, i. e. " painted," or rather " delineated "; as the cotton cloth to be decorated, after first being covered with a film of wax, poured on at the boiling point, has the design literally delineated throughout it with a sharp pointed style, before being dipped into the dye, which colours the cloth only where the wax has been removed by the style. Then, when the dye has been fixed, the remaining wax is melted off. Sometimes this process is repeated over and over again, with a different dye each time, thus producing wonderfully elaborate designs; but the most pleasing results are always obtained from a single application of it, as, for instance, in the spriggled *batiks*, with their simple floral patterns pencilled in monochrome on the natural cream-coloured surface of the cotton cloth. These so-called " Java girdles," including dress pieces of all sorts, such as robes, mantles, veils, and also curtains, have been celebrated in India from the time of the first introduction of Hindu civilisation into the Indian Archipelago; and in the play of *Málaté and Mádháva* (see Wilson's *Theatre*

of the Hindu (1871), Vol. II. p. 74), attributed to the eighth century A.D., are expressly referred to under the phrase *chitra-Javanika*, "*Javanese chintz*;" in this place the painted curtain, or *peplos*, suspended before the *adytum* or temple into which, in the third act, Makaranda retires to make up his toilet as a female.—The first Letter Book of the East India Company, 1600–1619, p. 59, note 4.

Bleaching. The process of removing the original colour from the calico. In early times natural means combined with air and sunlight were used. The chloride process was invented in the eighteenth century.

Block. A piece of wood cut endways of the grain which is used, when carved in the necessary way, to impress the pattern on cotton or other material.

Block-prints. Patterns printed from wood blocks. In some cases it is something of a misnomer, only the outlines being really printed and the other colours applied by hand or by immersing the cloth in dye, the parts not required to be coloured being protected by wax.

Boundage. The eighteenth century term for the outline, generally printed in black but sometimes partly in red. The boundage on a print with a black or dark-coloured field was often very thick to simplify the task of painting in the ground.

Calendering. The calendering of Indian and eighteenth-century English chintzes was a very different thing to the calendered chintzes of the present day. They received a smooth polished surface, but were quite flexible and did not crackle or break. The fineness of the web used accounted in a measure for this, but still more the fact that the polish was produced by pressure and not by starch and size. This surface retains its glaze to a considerable extent, even after several washings, though it gradually lessens.

Calico. This word is derived from Calicut in India, whence the first supplies were received. In early days it was most

generally used to describe a decorated fabric, though now it has lost this meaning. It was at times used as an adjective to mean parti-coloured; thus " a calico mare " was a piebald mare, and a " calico pig " a spotted pig.

" *Callico printing.*" This term was used for any kind of printing in colours, even on woollen or linen.

Carpet. In the seventeenth and eighteenth centuries this word was used to describe a rug, mat or a cover for a chest or table.

Chint, Chintz, Chints, Chintse. All these forms of the word were in use in bygone times. The original spelling is " Chint," with its plural Chints. Gradually the plural was universally adopted and the modern spelling came into use in the eighteenth century. It then signified a cotton fabric painted or printed with colours in fast dyes. Now it is reserved for glazed material.

Cœurdoux. A Jesuit priest who studied the art of calico painting in India. His essay on the art is published in a book entitled *Lettre Edifiantes*, 1742.

Cotton. Cotton is produced by plants of various species of the genus Gossypium, to which belong common Mallows and Hollyhocks. The fibre is contained in the fruit, which is a 3–5 celled capsule within which is contained the cotton enshrouding the numerous seeds. There was comparatively little trade in cotton until the last hundred and fifty years, although it had been imported since the tenth century, mainly, it would appear, in the earliest times for use as candle wicks. Later it was used for mixing with wool and with linen. English spinners were not sufficiently skilful to make a cotton thread which was strong enough to be used as a warp, and through all the anti-cotton legislation these old-established mixtures were permitted as being native manufacture.

The principal inventions which transformed the cotton industry in the eighteenth century were :

90459

Arkwright. Water frame, 1769.
Hargreaves. Jenny, 1770.
Crompton. Mule, 1780.
Cartwright. Power loom, 1785.

These inventions were only introduced in the teeth of bitter opposition from workmen, and rival manufacturers who saw in them a menace to the trade, but they ultimately were, from a commercial point of view, an immense advantage to the industry.

Crompton. Inventor of the mule machine, 1779.

Cylinder printing, or *Machine printing*. The mechanical method of printing in which the design is engraved on rollers.

" *Discharge* " *prints*. These prints have a very similar effect to the simple white or colour reserve prints, but the effect is obtained the reverse way. The cloth is dyed blue and the colour of the pattern bleached or discharged by the use of a powerful chemical. In the eighteenth century the prepared juice of lemons was employed.

" *Drug*." A term used in the eighteenth century for the mordant used as a preparation for the dye. It combines with the colour and makes it fast.

Fast colour. Colour that did not fade or run. These words were stamped on some cottons to denote their quality. In French the equivalent phrase " Bon tenit," was similarly used.

Field. The term sometimes used to describe a background of solid colour. The field in block-printed cottons was often put in by hand.

Furniture. This word was used (and still is to some extent) to describe curtains and bed-hangings of some textile; the wooden part, which in the modern meaning of the word would generally be the most important part, is not included in the term. Thus " bed furniture " would include the curtains and quilt, not the posts and frame.

Hargreaves. Inventor of the spinning jenny, 1770.

Indiennes. The French term for Indian chintzes, afterwards applied to European chintzes and dressing-gowns made of these fabrics.

Indigo is obtained from a plant largely grown in India. Of recent years chemical substitutes have been used, but they were not known until the nineteenth century.

Madder. This and other plants with the same properties was the most important constituent of all old dyeing and printing on cotton goods, and though to a large extent the actual plant has been superseded by chemical products, they are essentially the same as those derived from the madder. There are many varieties of the madder tribe, the kind used in dyeing is *Rubia tinctorum.* It is a native of Asia, and probably also of the south of Europe. The root is also produced in Western Europe, and large quantities are grown in New Zealand, but that which comes from hotter climes is better. The colouring is chemically a mixture of two colours—Alisarine, which gives the bright red shades, and Purpurine, which gives the purple tones. Its properties have been known for ages.

Maul or *Mallet.* A sort of wooden hammer with which a block printer strikes the back of the block in order to transfer the colour evenly to the calico or other material.

Mordant. A preparation for the application of the true colouring agent, with which it combines and fixes it on to the cotton.

O'Brien, Charles. A calico printer who published a book called *The Callico Printer's Assistant.* It ran through several editions and gives an interesting account of the state of the cotton printing trade at the end of the eighteenth century.

Palampore. Large panels of Indian chintz used as hangings or bed-coverings. They are often twelve feet or more high by eight or nine feet wide. They were made principally at Masulipatam, Fatehgarh, Shikarpur, Hagara and elsewhere.

Sir George Birdwood says of them, " In point of art decoration they are simply incomparable. As art works they are to be classed with the finest Indian pottery and the grandest carpets."

Peel. The father of the first Sir Robert Peel. About 1760 he set up the first cotton-printing mills in Lancashire near Blackburn.

Peel, Sir Robert. The most important figure in the history of English cotton printing. He was born in 1750. His son, the second Sir Robert Peel, was the great statesman.

Pencillers. The workpeople who added colours by hand to the block-printed outline. Indigo was very often thus applied.

Petticoat valance. A bed valance that was gathered into a flounce. So called to distinguish it from the plain stiffened valances.

Pigment. A colour that does not become part of the fabric, but is merely fixed or cemented to it by some medium such as gum or size.

Pins, Pinning. These words have two meanings in old accounts of chintz prints. In the first they signify the points attached to the block by which the printer was enabled to gauge the position of the block. These are called pitch pins. The second meaning is the numerous small brass pegs or nails driven into a block and used as part of the patterns.

Pintado. An early name for the painted Indian " callicoes." The word was used by the Portuguese, in which language it is equivalent to " painted." The word was used in England in the seventeenth century to describe chintzes. It was natural that the term should be adopted, as the capture of a Portuguese vessel by Drake at the time of the conquest of the Armada containing many Indian calicoes and other valuable goods was one of the principal means of attracting English attention to the profit likely to be derived from trade with the East Indies. It is also spelt *Pintadoe.* " Pintadoes " were painted cotton cloths, that is, chintzes

(Sanskrit, *chitra*, " spotted," " variegated," as in *chitraka*, the " Cheeta " or " hunting leopard," *Felis jubata ;* and *chital*, the " Spotted deer," *Axis maculatus*) so called from the Portuguese " *pinta*," " painted," literally " spotted," as in *Pintado*, the " Guinea-fowl," and, indeed, any " spotted " bird; thus Fryer, in his *Travels* (1698), p. 12, writes : " Gaining upon the East with a slow pace, we met those feathered ' harbingers of the Cape, as *Pintado*-birds, *Mangosaluedos*, *Albetrosses*.' "—The first Letter Book of the East India Company, 1600–1619 (Birdwood and Foster), p. 59, note 1.

Piqué or *Pinned work*. Towards the end of the eighteenth century a great vogue for patterns of this kind arose. Entire designs were sometimes built up of rows of pins which printed as tiny dots. Sometimes they formed only the outlines.

Pouncing. A pounced outline guided Indian calico painters in drawing their outlines. A drawing was made on paper; all the principal lines were followed in a line of tiny holes pierced with a needle. Some very finely ground charcoal was tied in a piece of muslin and dusted over the paper and sifted through the holes, giving a faint guide line which was drawn in with a brush and liquid colour.

Red print. A print in a single tone of red, printed from a copper plate. The term is generally used for a special style of printing used in the middle of the eighteenth century.

Reserve prints. In this style of printing the pattern is shown in white on a coloured ground, often blue. The pattern has in these cases been protected by wax or a mixture of tallow and pipeclay. When this composition is cleared away the pattern appears *en silhouette*. Many of these patterns are extremely elaborate. The reserve process was one of the methods adopted in carrying out the " painted callicoes " of the East.

Resist. Another name for " reserve."

Selvedge. The extreme outside edge of a woven fabric.

Sieve. A shallow vessel in which the colour was held ready for the printer's use.

Solid green. When a green was printed as a single colour, and not by a combination of blue and yellow applied separately, it was thus described.

Stencil. The outline of an Indian chintz is often described as stencilled. A better term would be pounced. The outline as it appears when finished is actually painted by hand over a stencilled or pounced guide line.

Toiles de Jouy. French printed cottons from the works near Versailles.

Townsmen. The old term for a commercial traveller.

Turkey red. A brilliant fast red dye introduced into England from the Levant in the eighteenth century, probably through France, as the first British Turkey red works is said to have been founded by a Frenchman named Papillion at Glasgow.

Union. A material with cotton woof and linen warp much used in the eighteenth century for printing on. It was exempt from the Act of Prohibition.

Warp. The threads running longways of the cloth; they are the fixed threads in and out of which the woof is alternated.

Weft or *Woof.* The thread running across the cloth which is woven in and out of the warp threads by means of a shuttle.

Weld. The source of the yellow colour used in the old method of dyeing. It was cultivated largely in England in the eighteenth century.

Wyatt. Inventor of spinning by rollers, 1783.

THE END

PRINTED IN GREAT BRITAIN BY
RICHARD CLAY & SONS, LIMITED,
BUNGAY, SUFFOLK.